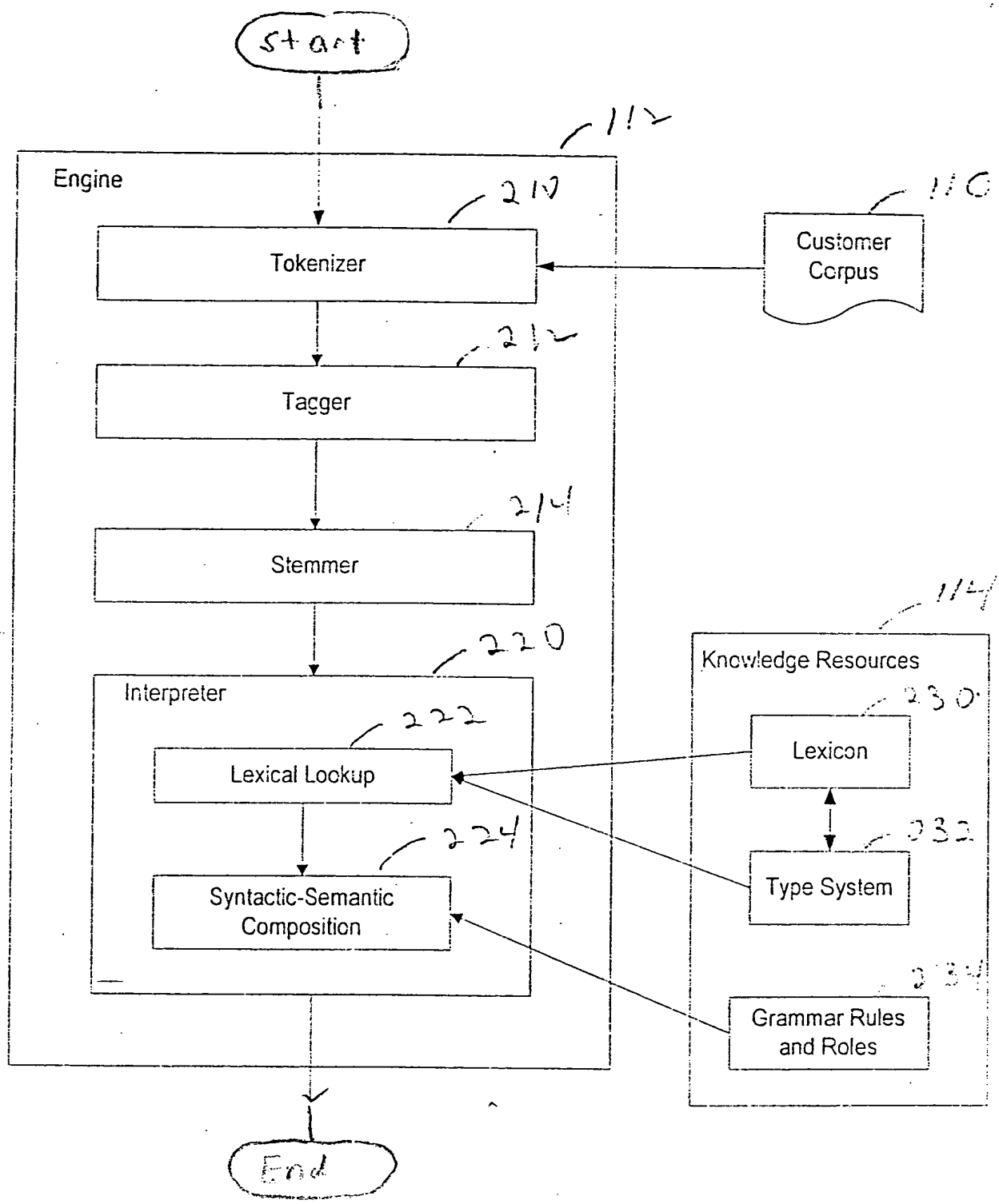

start
112
Engine
210
Tokenizer
110
Customer Corpus
212
Tagger
214
Stemmer
220
Interpreter
222
Lexical Lookup
224
Syntactic-Semantic Composition
114
Knowledge Resources
230
Lexicon
232
Type System
234
Grammar Rules and Roles
End

FIG 1

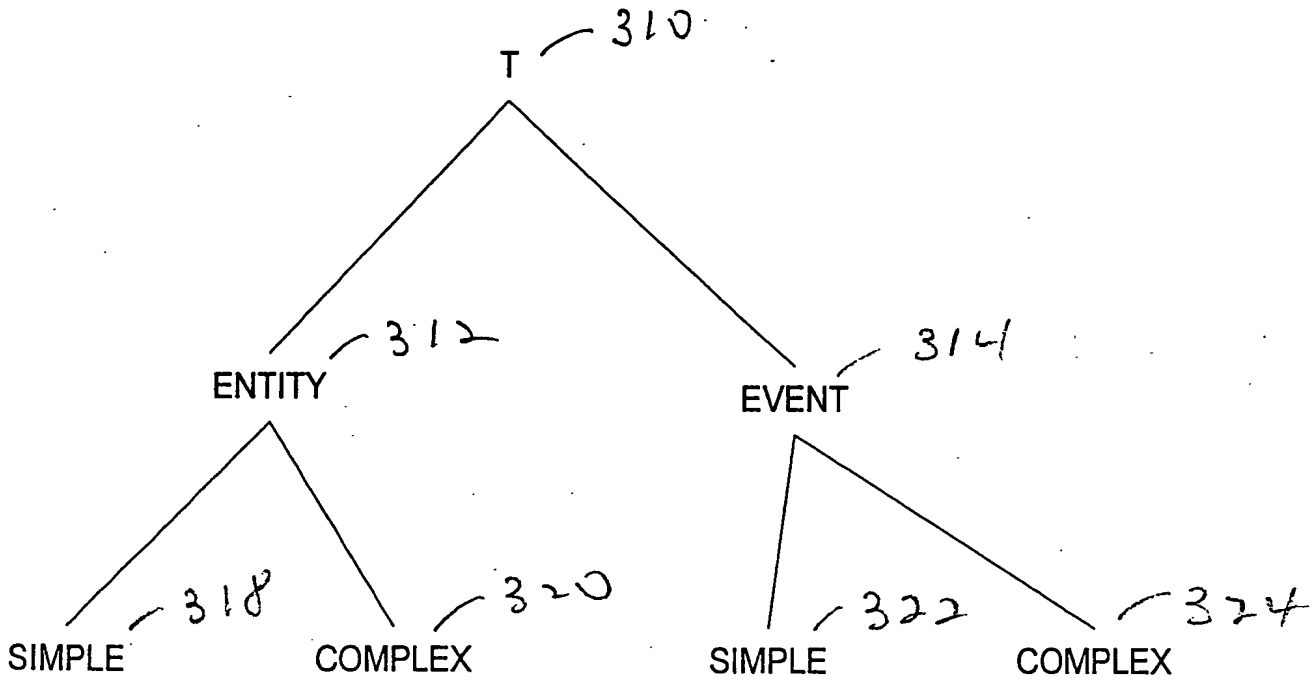
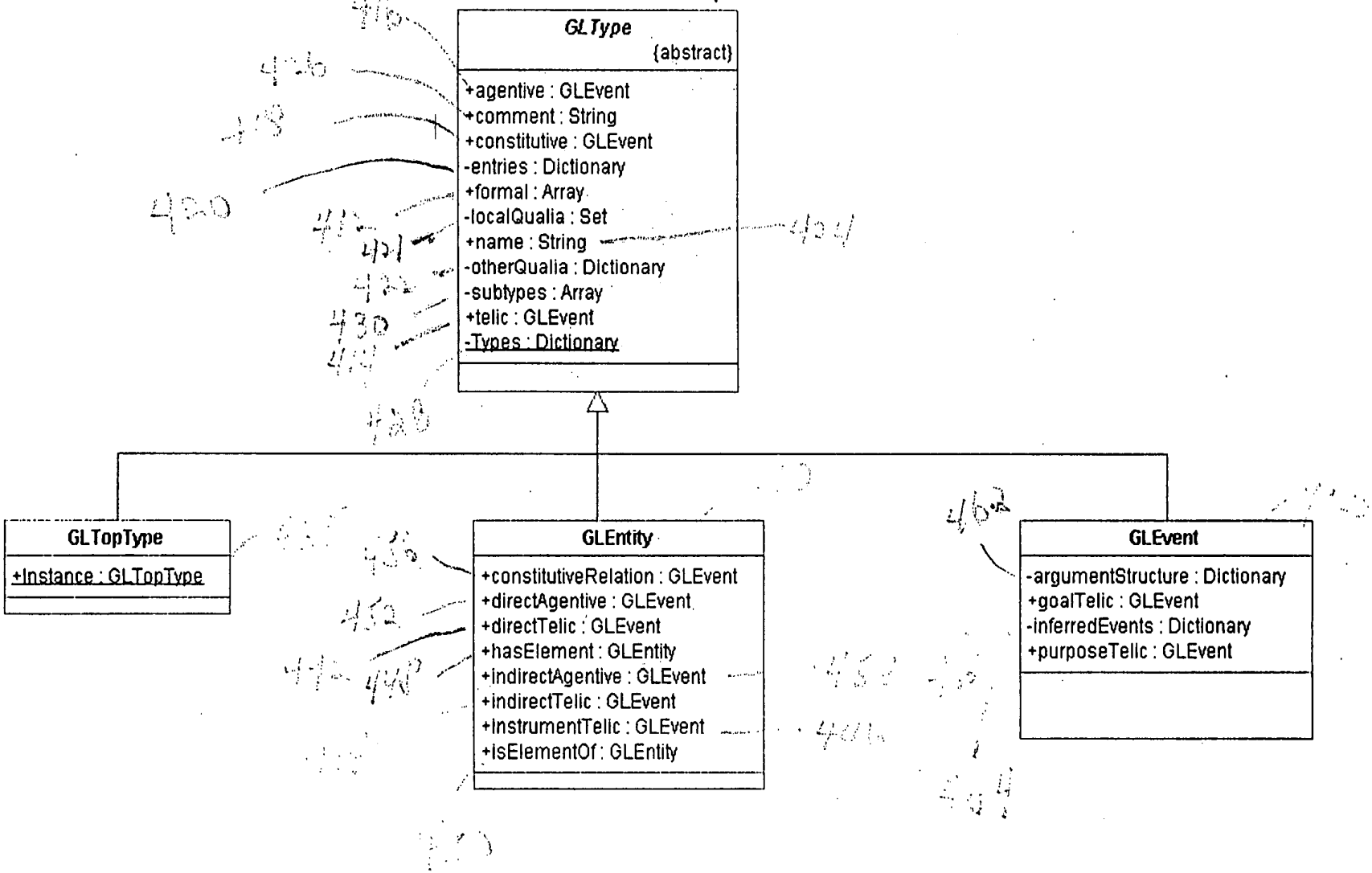

T
310
ENTITY
312
EVENT
314
SIMPLE
318
COMPLEX
320
SIMPLE
322
COMPLEX
324

FIG. 2


GLType
{abstract}
+agentive : GLEvent
+comment : String
+constitutive : GLEvent
-entries : Dictionary
+formal : Array
-localQualia : Set
+name : String
-otherQualia : Dictionary
-subtypes : Array
+telic : GLEvent
-Types : Dictionary
GLTopType
+Instance : GLTopType
GLEntity
+constitutiveRelation : GLEvent
+directAgentive : GLEvent
+directTelic : GLEvent
+hasElement : GLEntity
+indirectAgentive : GLEvent
+indirectTelic : GLEvent
+instrumentTelic : GLEvent
+isElementOf : GLEntity
GLEvent
-argumentStructure : Dictionary
+goalTelic : GLEvent
-inferredEvents : Dictionary
+purposeTelic : GLEvent

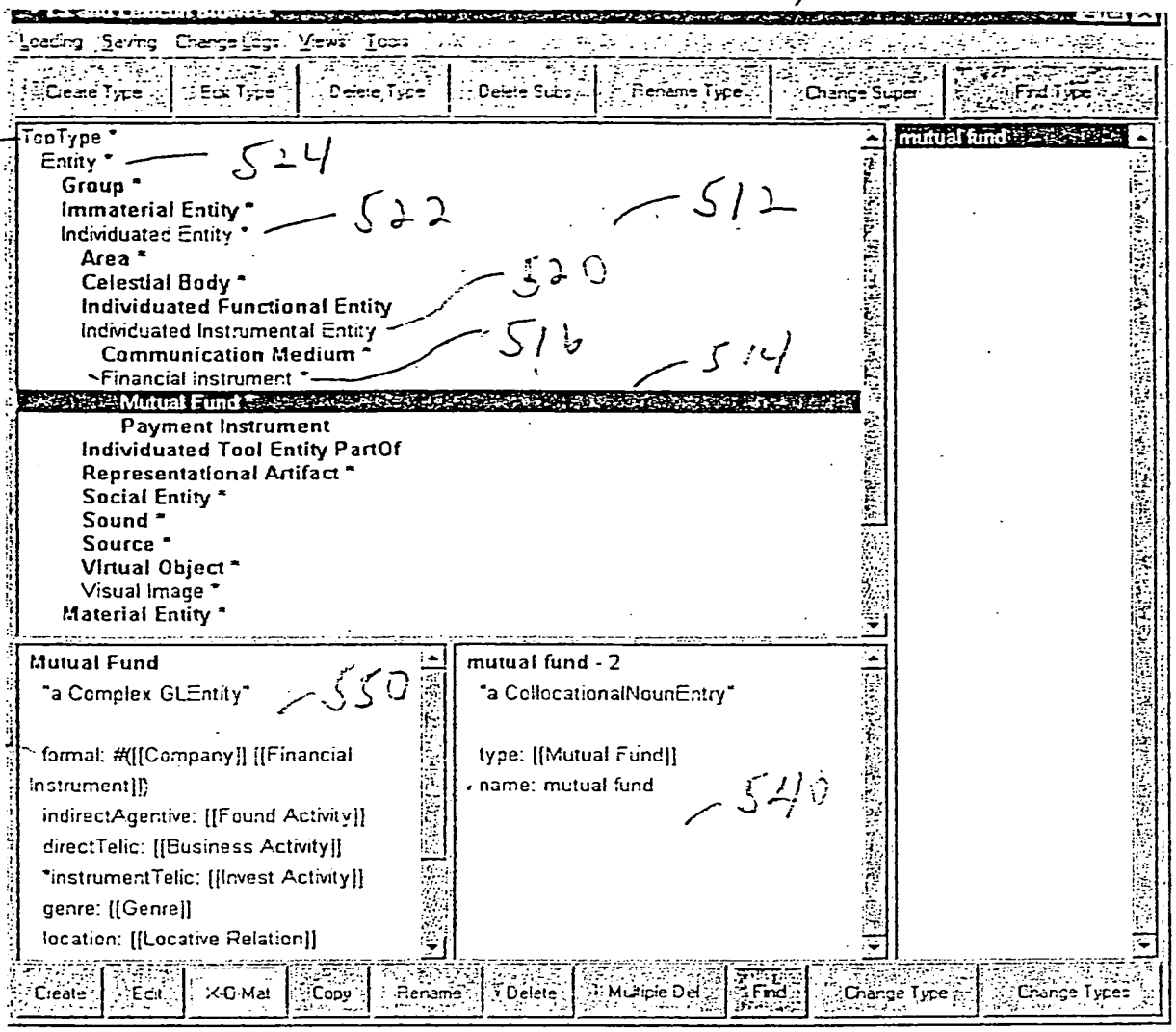

510a
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
526
524
522
512
520
516
514
TopType *
Entity *
Group *
Immaterial Entity *
Individuated Entity *
Area *
Celestial Body *
Individuated Functional Entity
Individuated Instrumental Entity
Communication Medium *
Financial Instrument *
Mutual Fund *
Payment Instrument
Individuated Tool Entity PartOf
Representational Artifact *
Social Entity *
Sound *
Source *
Virtual Object *
Visual Image *
Material Entity *
mutual fund
Mutual Fund
"a Complex GLEntity"
550
formal: #([[Company]] [[Financial Instrument]])
indirectAgentive: [[Found Activity]]
directTelic: [[Business Activity]]
instrumentTelic: [[Invest Activity]]
genre: [[Genre]]
location: [[Locative Relation]]
mutual fund - 2
"a CollocationalNounEntry"
type: [[Mutual Fund]]
name: mutual fund
540
Create
Edit
X-G-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types

Fig 4

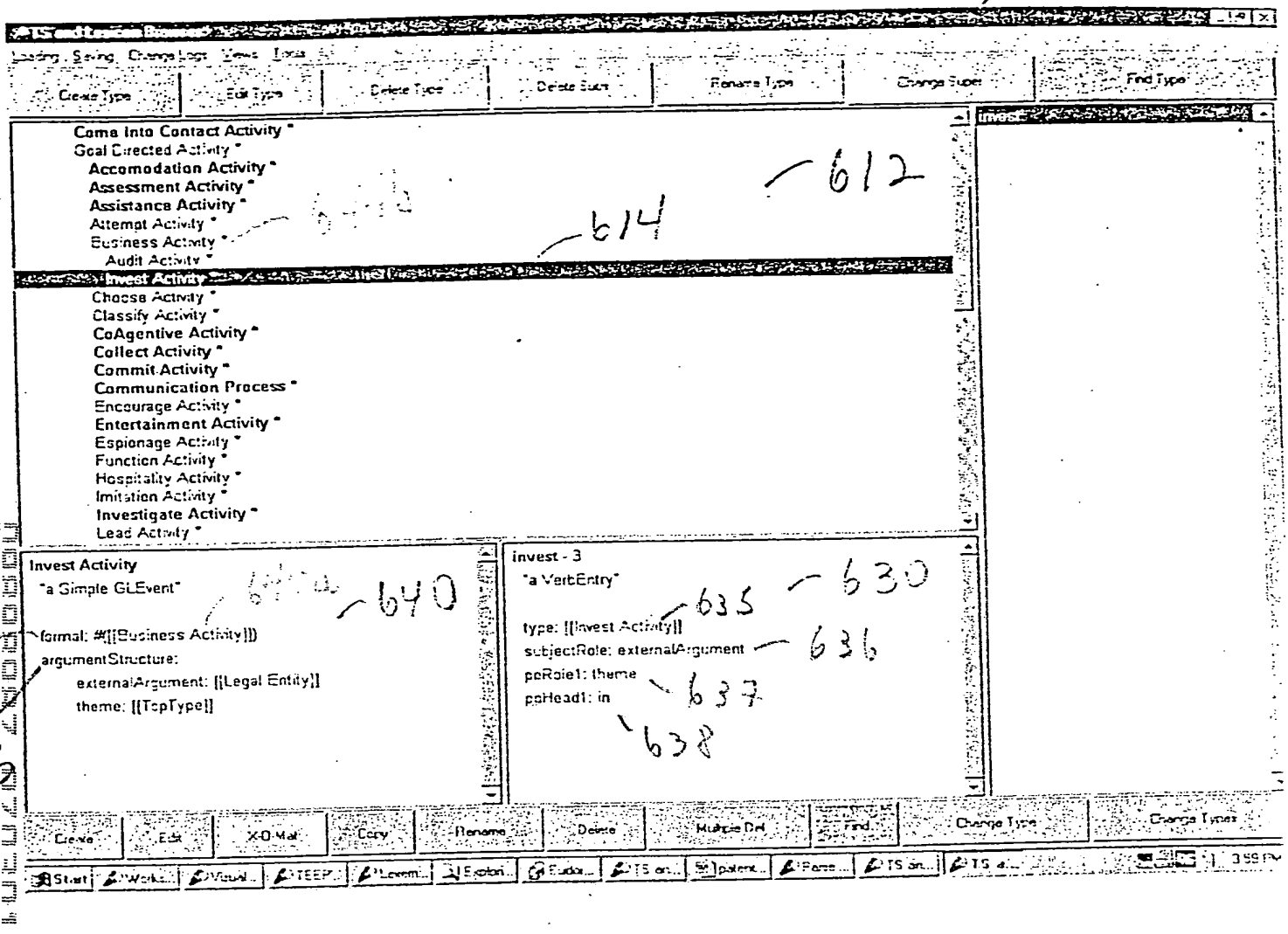

510b
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Slots
Rename Type
Change Super
Find Type
Come Into Contact Activity *
Goal Directed Activity *
Accomodation Activity *
Assessment Activity *
Assistance Activity *
Attempt Activity *
Business Activity *
Audit Activity *
612
614
Invest Activity
Choose Activity *
Classify Activity *
CoAgentive Activity *
Collect Activity *
Commit Activity *
Communication Process *
Encourage Activity *
Entertainment Activity *
Espionage Activity *
Function Activity *
Hospitality Activity *
Imitation Activity *
Investigate Activity *
Lead Activity *
Invest Activity
"a Simple GLEvent"
640
formal: #[[Business Activity]]
argumentStructure:
externalArgument: [[Legal Entity]]
theme: [[TopType]]
invest - 3
"a VerbEntry"
635
630
type: [[Invest Activity]]
subjectRole: externalArgument
636
roRole1: theme
637
roHead1: in
638
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types
Start
3:59 PM

Fig 5

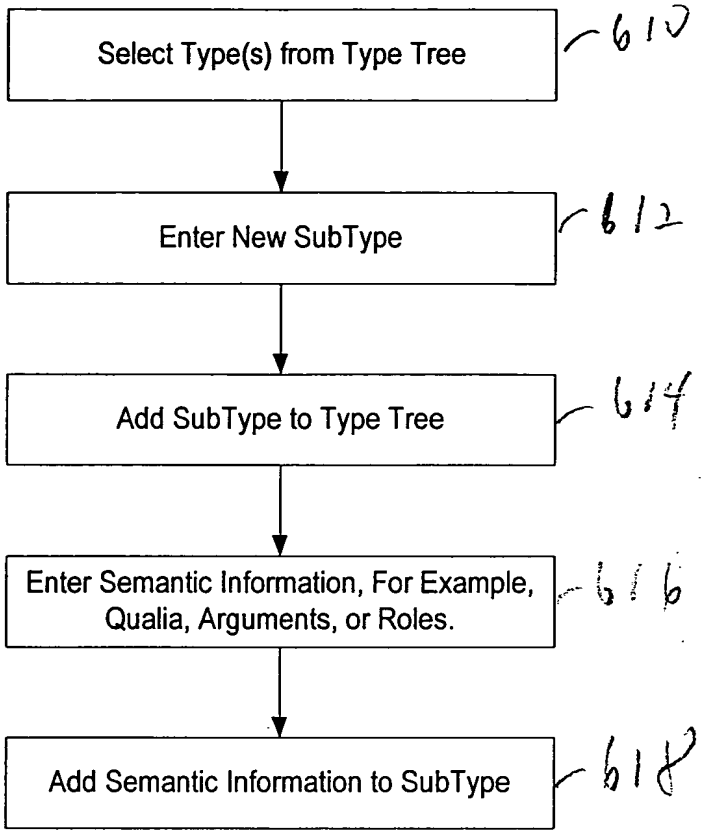

Select Type(s) from Type Tree
610
Enter New SubType
612
Add SubType to Type Tree
614
Enter Semantic Information, For Example, Qualia, Arguments, or Roles.
616
Add Semantic Information to SubType
618

FIG. 6A

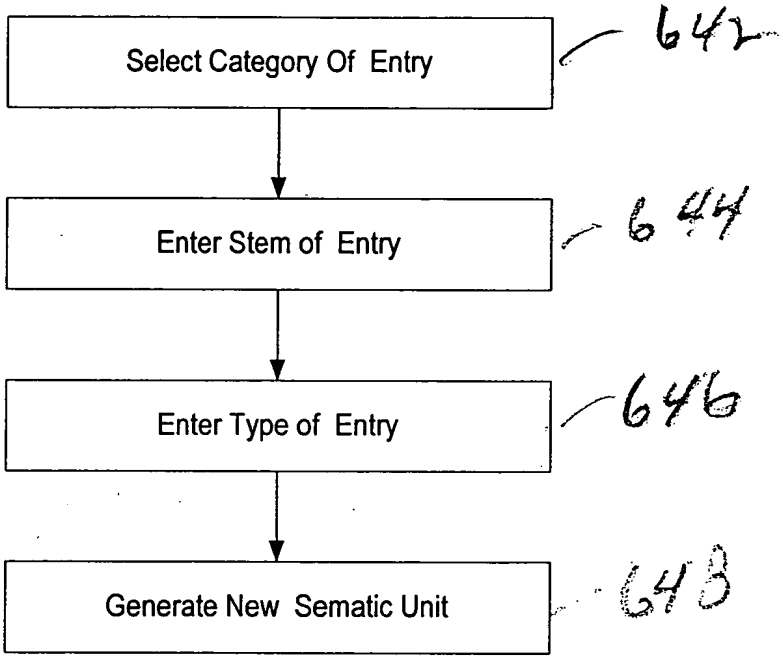

Select Category Of Entry
642
Enter Stem of Entry
644
Enter Type of Entry
646
Generate New Sematic Unit
648

FIG. 6B

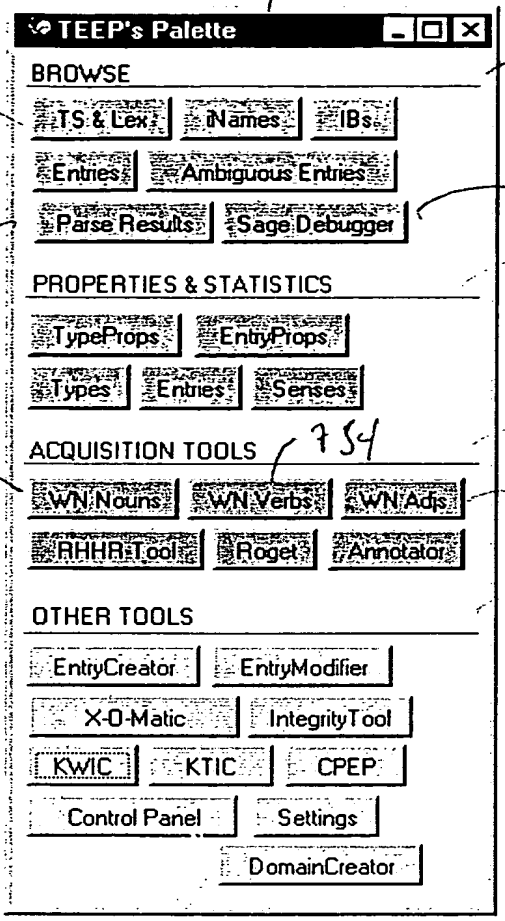

TEEP's Palette
BROWSE
TS & Lex
Names
IBs
Entries
Ambiguous Entries
Parse Results
Sage Debugger
PROPERTIES & STATISTICS
TypeProps
EntryProps
Types
Entries
Senses
ACQUISITION TOOLS
WN Nouns
WN Verbs
WN Adjs
RHHR Tool
Roget
Annotator
OTHER TOOLS
EntryCreator
EntryModifier
X-O-Matic
IntegrityTool
KWIC
KTIC
CPEP
Control Panel
Settings
DomainCreator
710
720
722
726
724
740
750
752
754
756
760

Fig 7

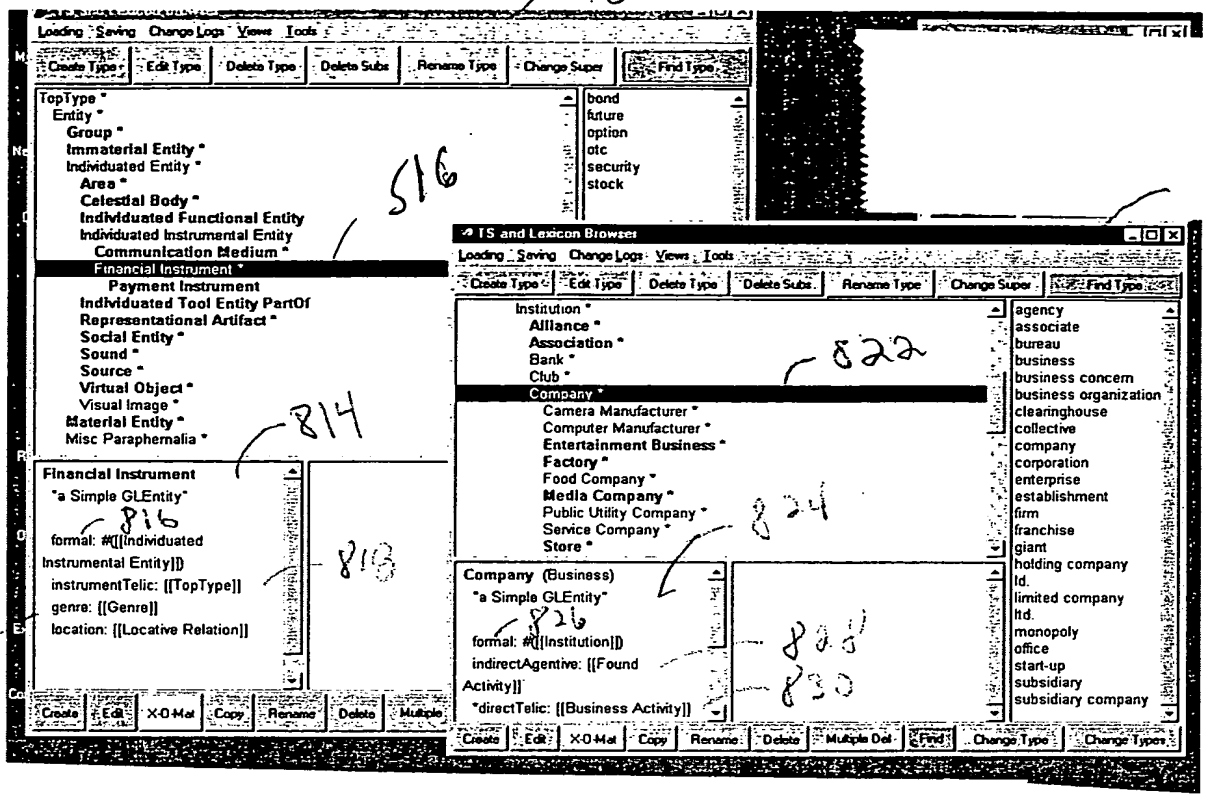

810a
810b
516
814
816
818
820
822
824
826
828
830
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
TopType *
Entity *
Group *
Immaterial Entity *
Individuated Entity *
Area *
Celestial Body *
Individuated Functional Entity
Individuated Instrumental Entity
Communication Medium *
Financial Instrument *
Payment Instrument
Individuated Tool Entity PartOf
Representational Artifact *
Social Entity *
Sound *
Source *
Virtual Object *
Visual Image *
Material Entity *
Misc Paraphernalia *
bond
future
option
otc
security
stock
TS and Lexicon Browser
Institution *
Alliance *
Association *
Bank *
Club *
Company *
Camera Manufacturer *
Computer Manufacturer *
Entertainment Business *
Factory *
Food Company *
Media Company *
Public Utility Company *
Service Company *
Store *
agency
associate
bureau
business
business concern
business organization
clearinghouse
collective
company
corporation
enterprise
establishment
firm
franchise
giant
holding company
ltd.
limited company
ltd.
monopoly
office
start-up
subsidiary
subsidiary company
Financial Instrument
"a Simple GLEntity"
formal: #([[Individuated Instrumental Entity]])
instrumentTelic: [[TopType]]
genre: [[Genre]]
location: [[Locative Relation]]
Company (Business)
"a Simple GLEntity"
formal: #([[Institution]])
indirectAgentive: [[Found Activity]]
*directTelic: [[Business Activity]]
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple
Multiple Del
Find
Change Type
Change Types

Fig 8

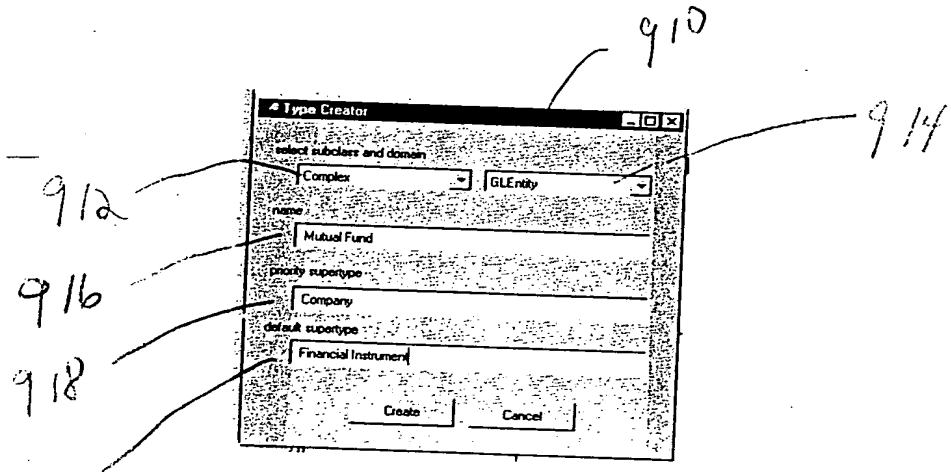

910
912
914
916
918
920
Type Creator
select subclass and domain
Complex
GLEntity
name
Mutual Fund
priority supertype
Company
default supertype
Financial Instrument
Create
Cancel

Fig 9

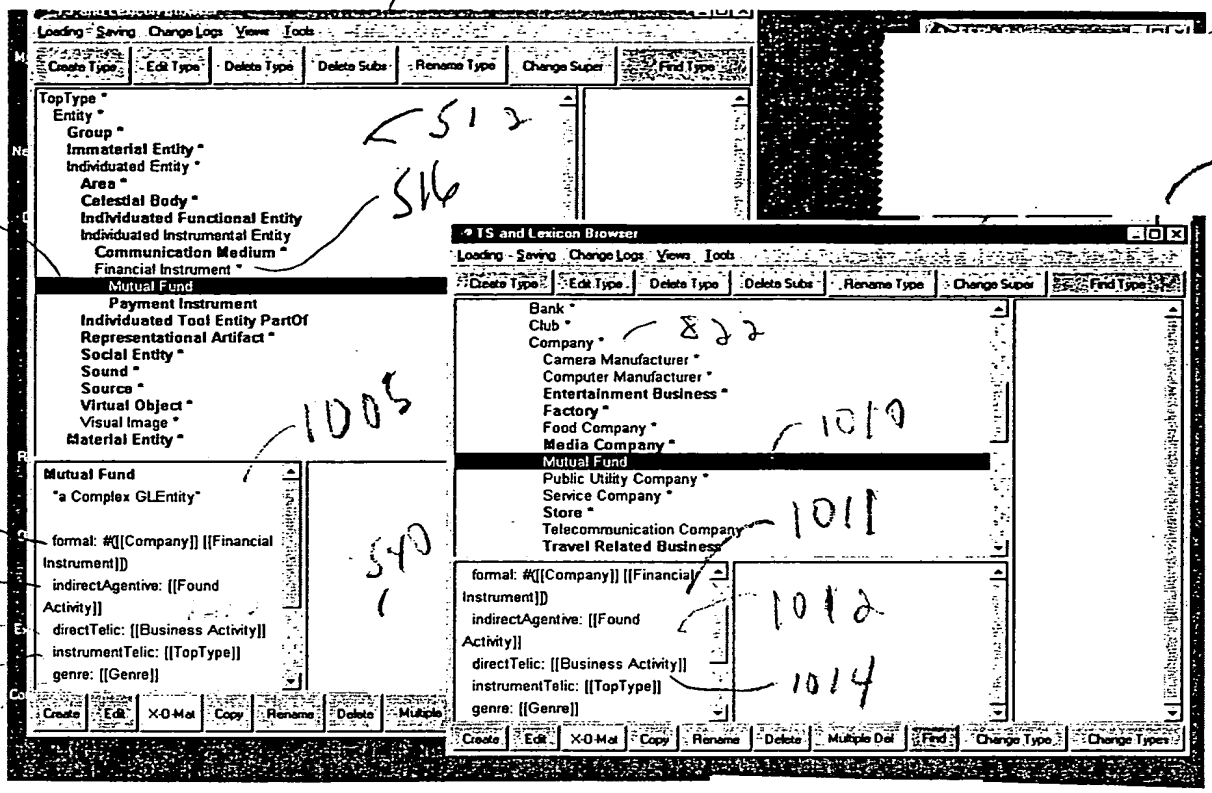
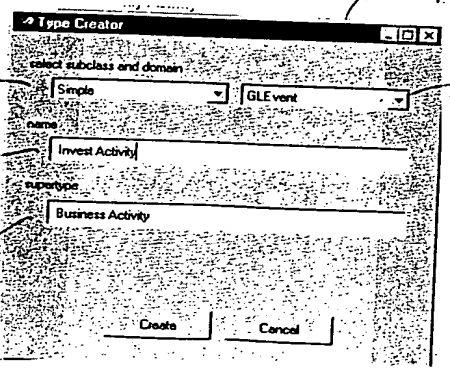

810a
810b
512
514
516
552
828
830
819
1005
1007
1009
1011
1012
1014
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
TopType *
Entity *
Group *
Immaterial Entity *
Individuated Entity *
Area *
Celestial Body *
Individuated Functional Entity
Individuated Instrumental Entity
Communication Medium *
Financial Instrument *
Mutual Fund
Payment Instrument
Individuated Tool Entity PartOf
Representational Artifact *
Social Entity *
Sound *
Source *
Virtual Object *
Visual Image *
Material Entity *
Mutual Fund
"a Complex GLEntity"
formal: #[[Company]] [[Financial Instrument]]
indirectAgentive: [[Found Activity]]
directTelic: [[Business Activity]]
instrumentTelic: [[TopType]]
genre: [[Genre]]
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple
TS and Lexicon Browser
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
Bank *
Club *
Company *
Camera Manufacturer *
Computer Manufacturer *
Entertainment Business *
Factory *
Food Company *
Media Company *
Mutual Fund
Public Utility Company *
Service Company *
Store *
Telecommunication Company *
Travel Related Business *
formal: #[[Company]] [[Financial Instrument]]
indirectAgentive: [[Found Activity]]
directTelic: [[Business Activity]]
instrumentTelic: [[TopType]]
genre: [[Genre]]
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types

Fig 10


910
1110
1112
1114
1116
Type Creator
select subclass and domain
Simple
GLEvent
name
Invest Activity
supertype
Business Activity
Create
Cancel

11

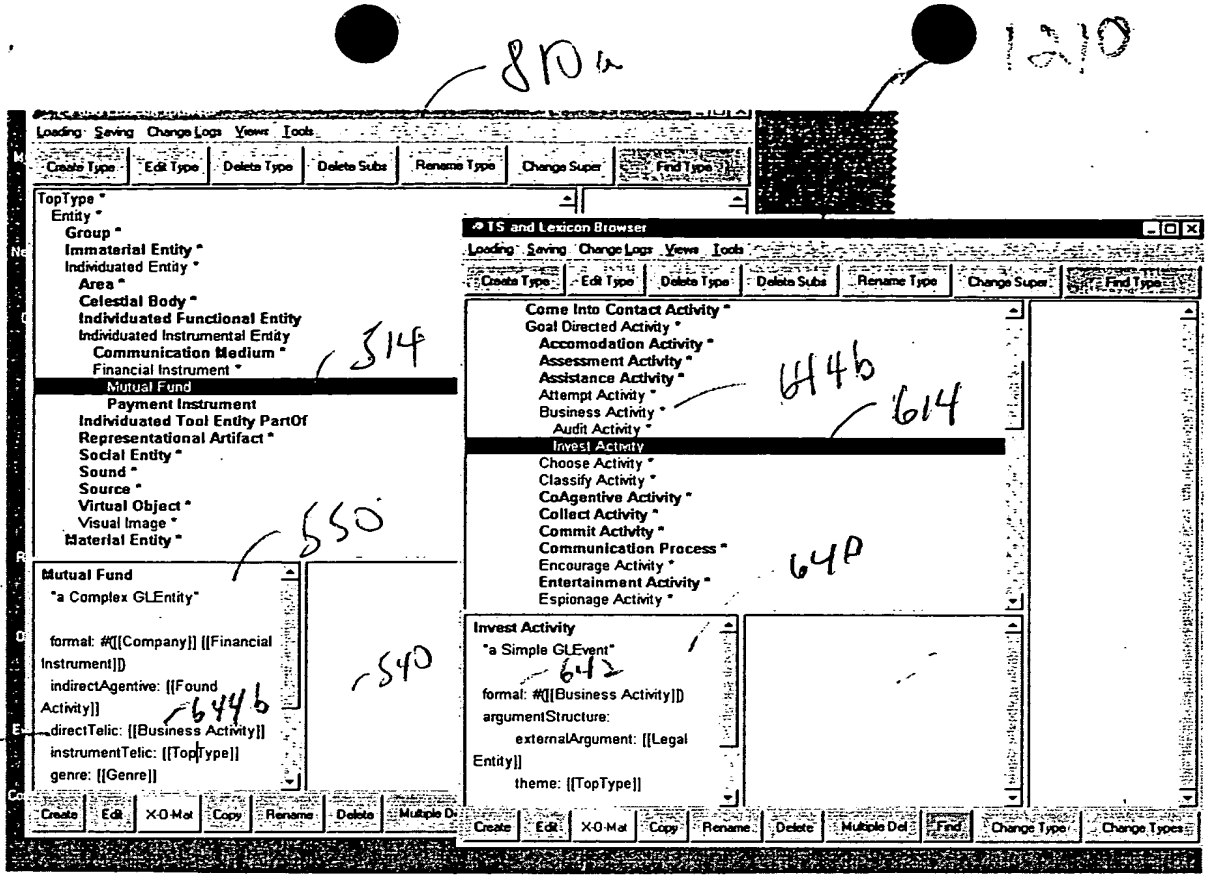

810a
1210
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
TopType *
Entity *
Group *
Immaterial Entity *
Individuated Entity *
Area *
Celestial Body *
Individuated Functional Entity
Individuated Instrumental Entity
Communication Medium *
Financial Instrument *
Mutual Fund
Payment Instrument
Individuated Tool Entity PartOf
Representational Artifact *
Social Entity *
Sound *
Source *
Virtual Object *
Visual Image *
Material Entity *
614
550
Mutual Fund
"a Complex GLEntity"
format: #[[Company]] [[Financial Instrument]]
indirectAgentive: [[Found Activity]]
directTelic: [[Business Activity]]
instrumentTelic: [[TopType]]
genre: [[Genre]]
644b
540
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple D
830
TS and Lexicon Browser
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
Come Into Contact Activity *
Goal Directed Activity *
Accomodation Activity *
Assessment Activity *
Assistance Activity *
Attempt Activity *
Business Activity *
Audit Activity *
Invest Activity
Choose Activity *
Classify Activity *
CoAgentive Activity *
Collect Activity *
Commit Activity *
Communication Process *
Encourage Activity *
Entertainment Activity *
Espionage Activity *
644b
614
640
Invest Activity
"a Simple GLEvent"
642
formal: #[[Business Activity]]
argumentStructure:
externalArgument: [[Legal Entity]]
theme: [[TopType]]
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types

Fig. 12

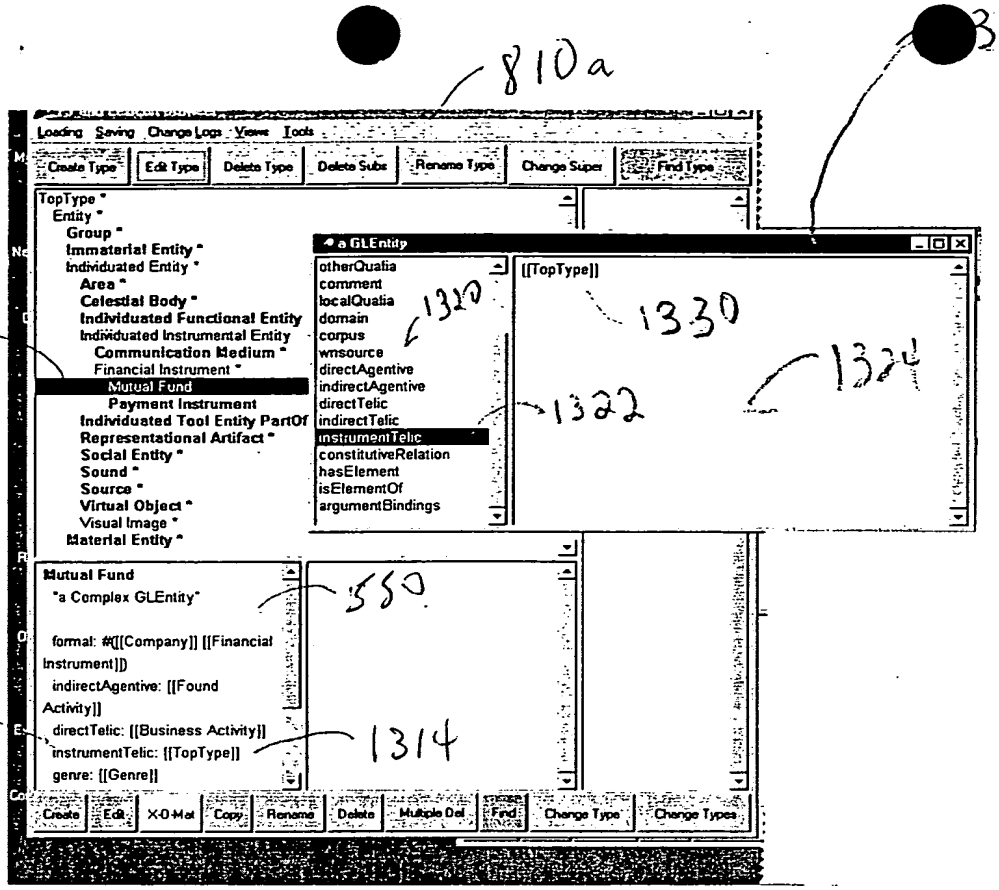

810a
310
814
1312
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
TopType *
Entity *
Group *
Immaterial Entity *
Individuated Entity *
Area *
Celestial Body *
Individuated Functional Entity
Individuated Instrumental Entity
Communication Medium *
Financial Instrument *
Mutual Fund
Payment Instrument
Individuated Tool Entity PartOf
Representational Artifact *
Social Entity *
Sound *
Source *
Virtual Object *
Visual Image *
Material Entity *
a GLEntity
otherQualia
comment
localQualia
domain
corpus
wmsource
directAgentive
indirectAgentive
directTelic
indirectTelic
instrumentTelic
constitutiveRelation
hasElement
isElementOf
argumentBindings
1320
[[TopType]]
1330
1324
1322
Mutual Fund
"a Complex GLEntity"
550
formal: #([[Company]] [[Financial Instrument]])
indirectAgentive: [[Found Activity]]
directTelic: [[Business Activity]]
instrumentTelic: [[TopType]]
1314
genre: [[Genre]]
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types

Fig 13

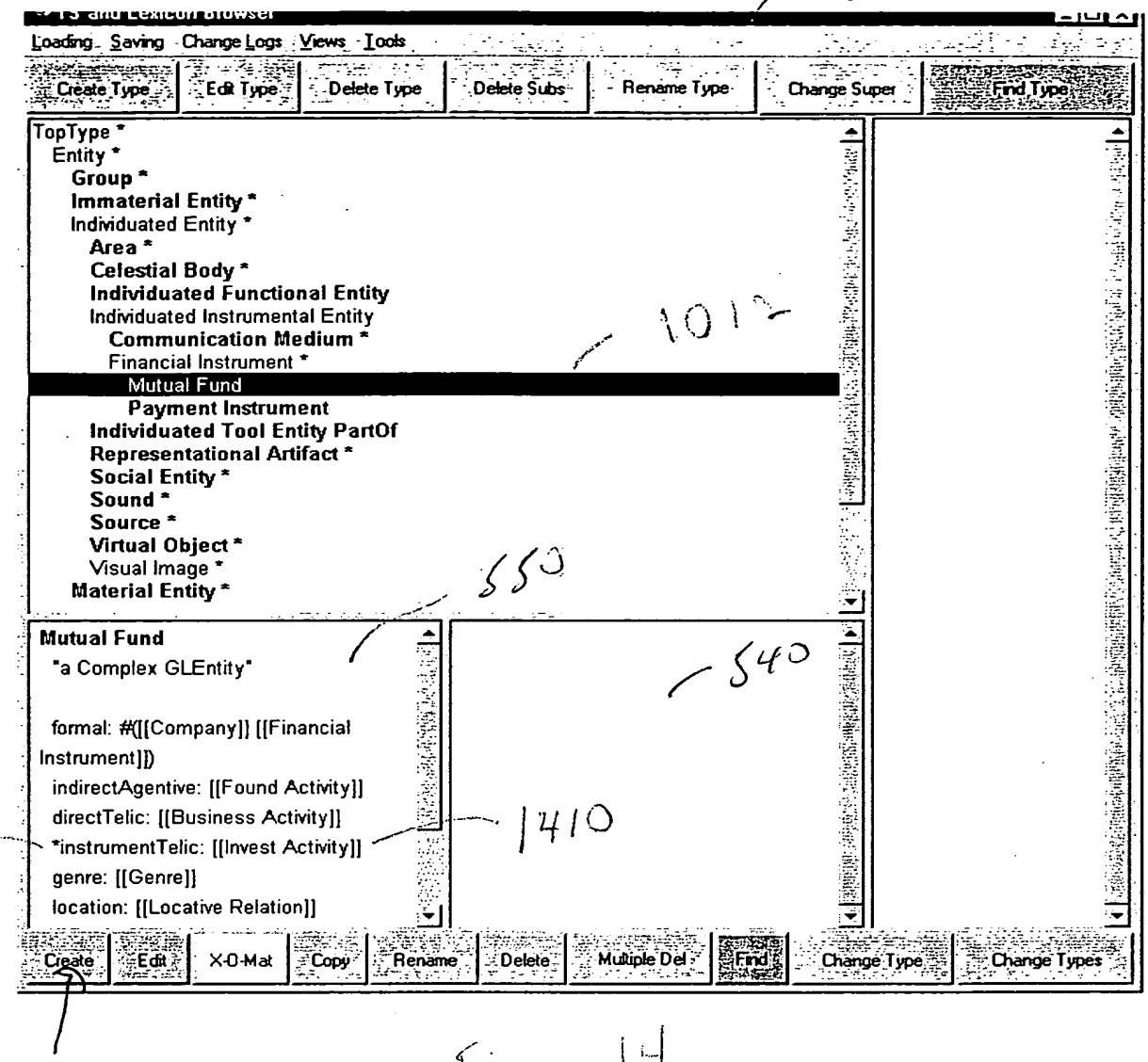

Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
TopType *
Entity *
Group *
Immaterial Entity *
Individuated Entity *
Area *
Celestial Body *
Individuated Functional Entity
Individuated Instrumental Entity
Communication Medium *
Financial Instrument *
Mutual Fund
Payment Instrument
Individuated Tool Entity PartOf
Representational Artifact *
Social Entity *
Sound *
Source *
Virtual Object *
Visual Image *
Material Entity *
Mutual Fund
"a Complex GLEntity"
formal: #([[Company]] [[Financial Instrument]])
indirectAgentive: [[Found Activity]]
directTelic: [[Business Activity]]
*instrumentTelic: [[Invest Activity]]
genre: [[Genre]]
location: [[Locative Relation]]
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types
810a
1012
550
540
1410
912

Fig 14

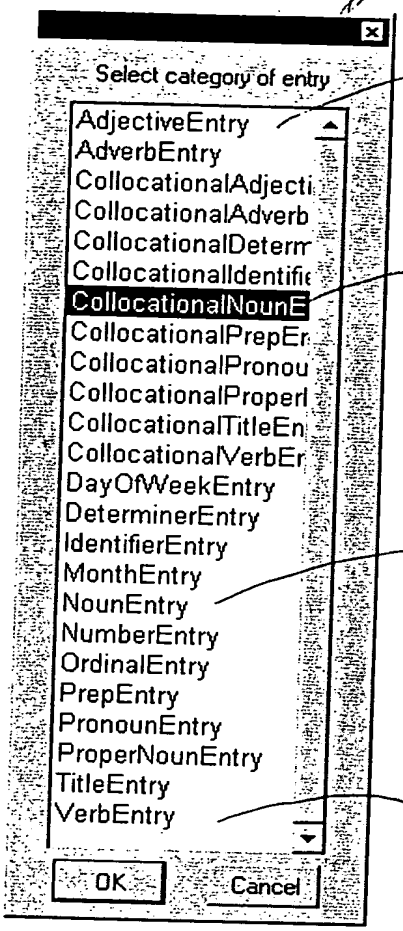

1510
1518
Select category of entry
AdjectiveEntry
AdverbEntry
CollocationalAdjecti
CollocationalAdverb
CollocationalDeterm
CollocationalIdentifie
CollocationalNounE
CollocationalPrepEn
CollocationalPronou
CollocationalProperl
CollocationalTitleEn
CollocationalVerbEr
DayOfWeekEntry
DeterminerEntry
IdentifierEntry
MonthEntry
NounEntry
NumberEntry
OrdinalEntry
PrepEntry
PronounEntry
ProperNounEntry
TitleEntry
VerbEntry
OK
Cancel
1512
1516
1514

Fig. 15

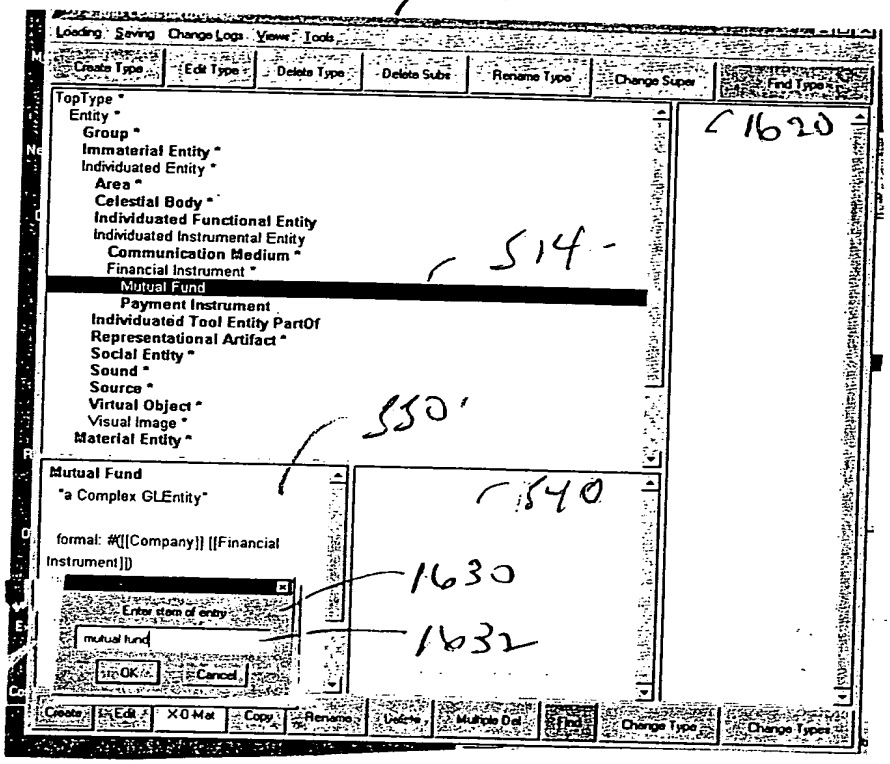

810a
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
TopType *
Entity *
Group *
Immaterial Entity *
Individuated Entity *
Area *
Celestial Body *
Individuated Functional Entity
Individuated Instrumental Entity
Communication Medium *
Financial Instrument *
Mutual Fund
Payment Instrument
Individuated Tool Entity PartOf
Representational Artifact *
Social Entity *
Sound *
Source *
Virtual Object *
Visual Image *
Material Entity *
1620
514
550
Mutual Fund
"a Complex GLEntity"
formal: #([[Company]] [[Financial Instrument]])
540
1630
Enter stem of entry
1632
mutual fund
OK
Cancel
Create
Edit
X0 Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types

Fig 16

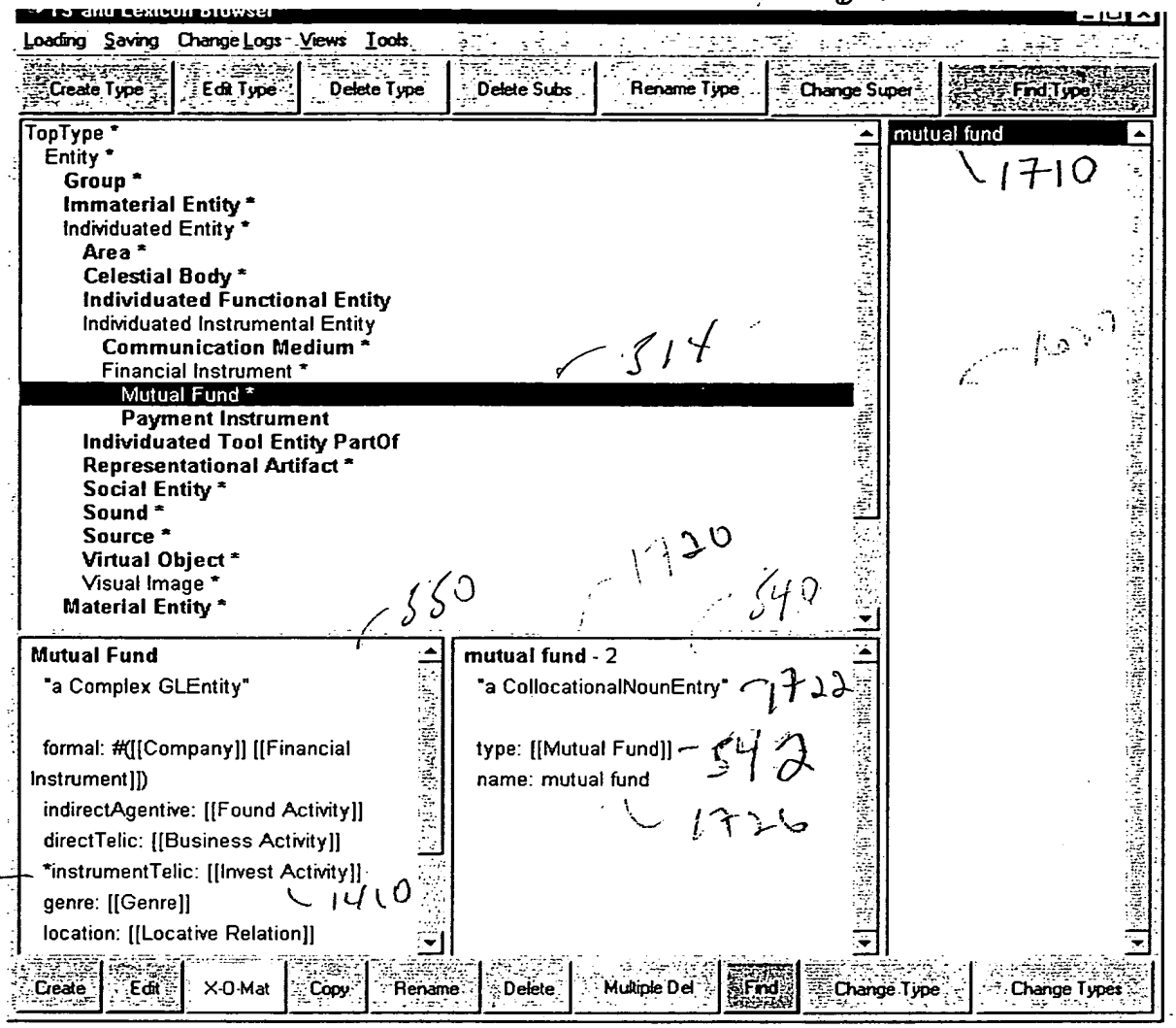

TS and Lexicon Browser
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
TopType *
Entity *
Group *
Immaterial Entity *
Individuated Entity *
Area *
Celestial Body *
Individuated Functional Entity
Individuated Instrumental Entity
Communication Medium *
Financial Instrument *
Mutual Fund *
Payment Instrument
Individuated Tool Entity PartOf
Representational Artifact *
Social Entity *
Sound *
Source *
Virtual Object *
Visual Image *
Material Entity *
mutual fund
1710
1720
1730
514
550
540
Mutual Fund
"a Complex GLEntity"
formal: #([[Company]] [[Financial Instrument]])
indirectAgentive: [[Found Activity]]
directTelic: [[Business Activity]]
*instrumentTelic: [[Invest Activity]]
genre: [[Genre]]
location: [[Locative Relation]]
1410
mutual fund - 2
"a CollocationalNounEntry"
1722
type: [[Mutual Fund]]
name: mutual fund
542
1726
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types

Fig 17

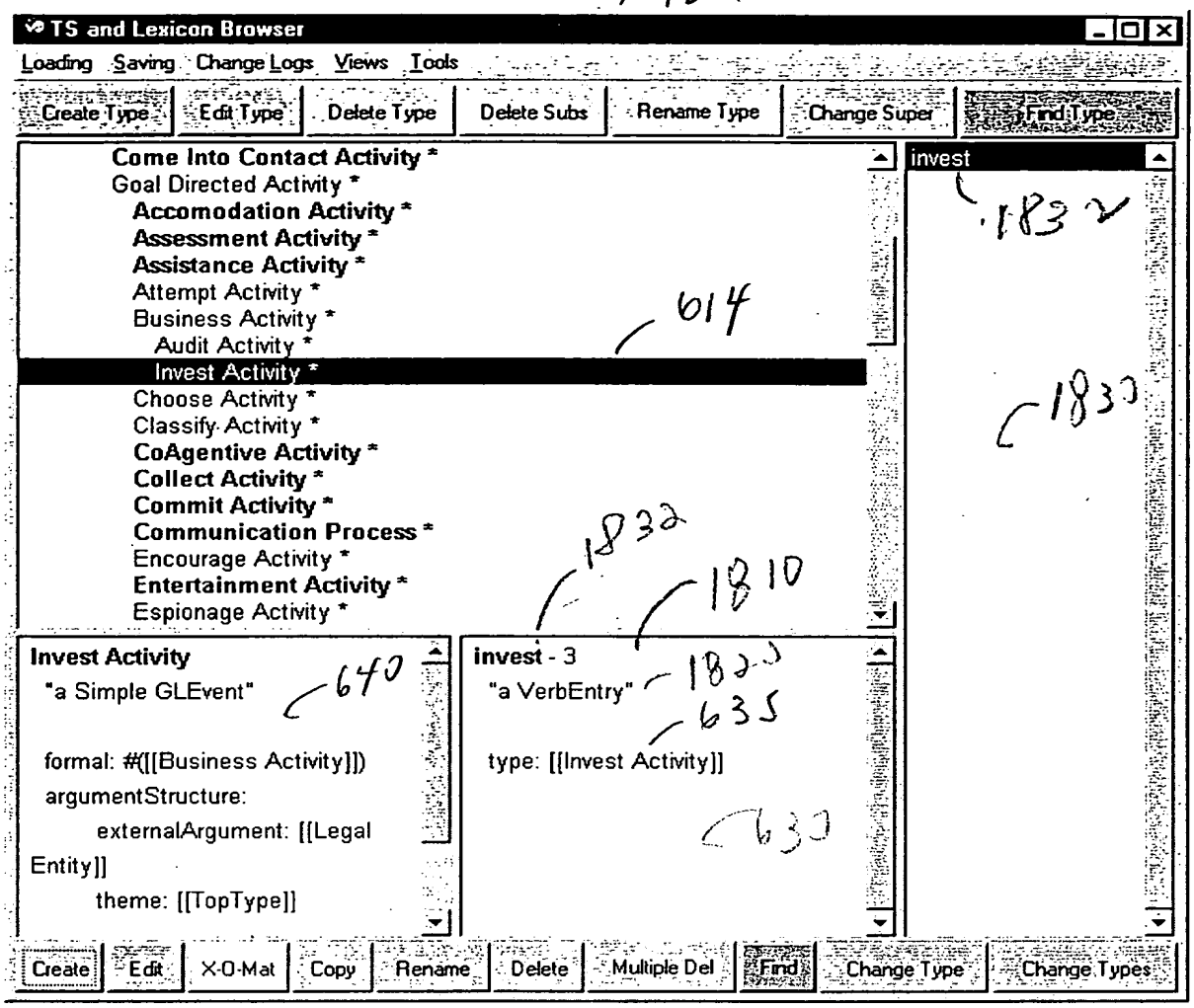

TS and Lexicon Browser
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
Come Into Contact Activity *
Goal Directed Activity *
Accomodation Activity *
Assessment Activity *
Assistance Activity *
Attempt Activity *
Business Activity *
Audit Activity *
Invest Activity *
Choose Activity *
Classify Activity *
CoAgentive Activity *
Collect Activity *
Commit Activity *
Communication Process *
Encourage Activity *
Entertainment Activity *
Espionage Activity *
invest
Invest Activity
"a Simple GLEvent"
formal: #([[Business Activity]])
argumentStructure:
externalArgument: [[Legal Entity]]
theme: [[TopType]]
invest - 3
"a VerbEntry"
type: [[Invest Activity]]
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types
1219
1832
614
1830
1832
1810
640
1820
635
630

Fig 18

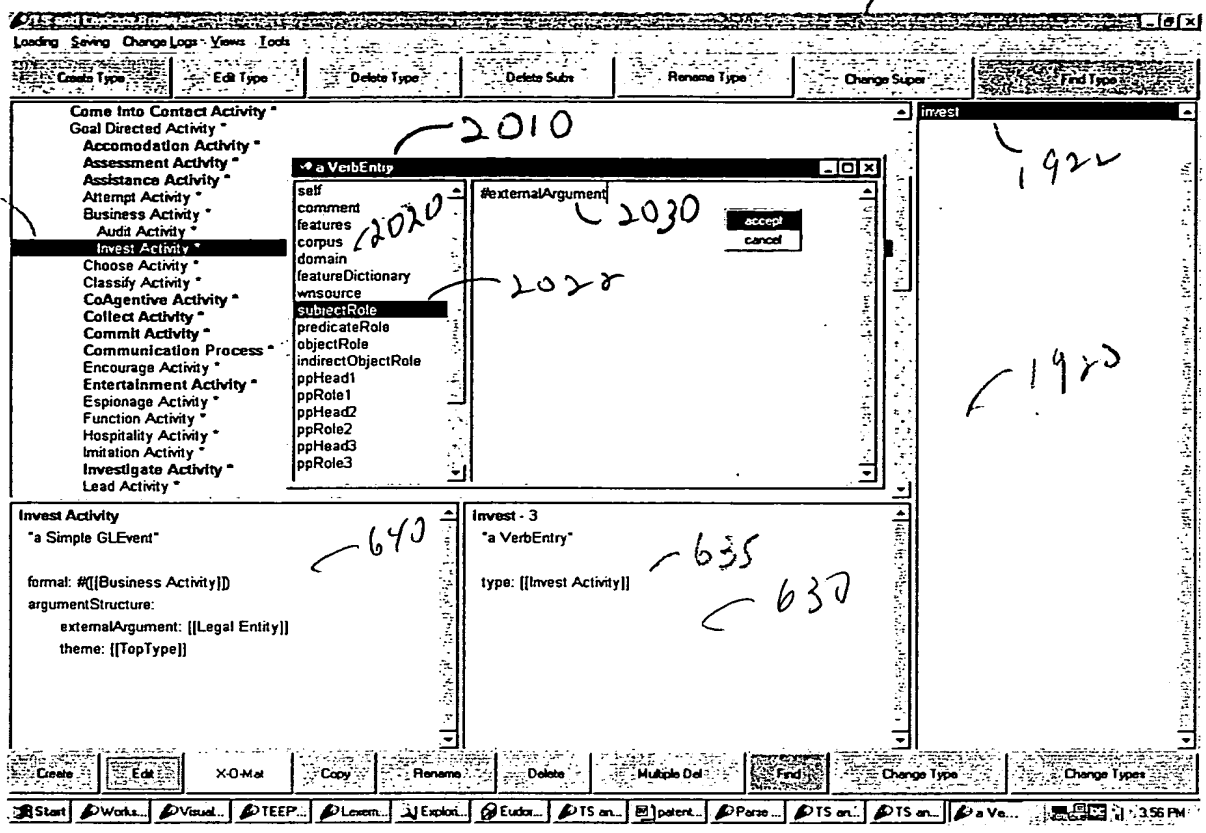

Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
Come Into Contact Activity *
Goal Directed Activity *
Accomodation Activity *
Assessment Activity *
Assistance Activity *
Attempt Activity *
Business Activity *
Audit Activity *
Invest Activity *
Choose Activity *
Classify Activity *
CoAgentive Activity *
Collect Activity *
Commit Activity *
Communication Process *
Encourage Activity *
Entertainment Activity *
Espionage Activity *
Function Activity *
Hospitality Activity *
Imitation Activity *
Investigate Activity *
Lead Activity *
a VerbEntry
self
comment
features
corpus
domain
featureDictionary
wnsource
subjectRole
predicateRole
objectRole
indirectObjectRole
ppHead1
ppRole1
ppHead2
ppRole2
ppHead3
ppRole3
#externalArgument
accept
cancel
invest
Invest Activity
"a Simple GLEvent"
formal: #([Business Activity])
argumentStructure:
externalArgument: [[Legal Entity]]
theme: [[TopType]]
Invest - 3
"a VerbEntry"
type: [[Invest Activity]]
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types
Start
3:56 PM

Fig 19

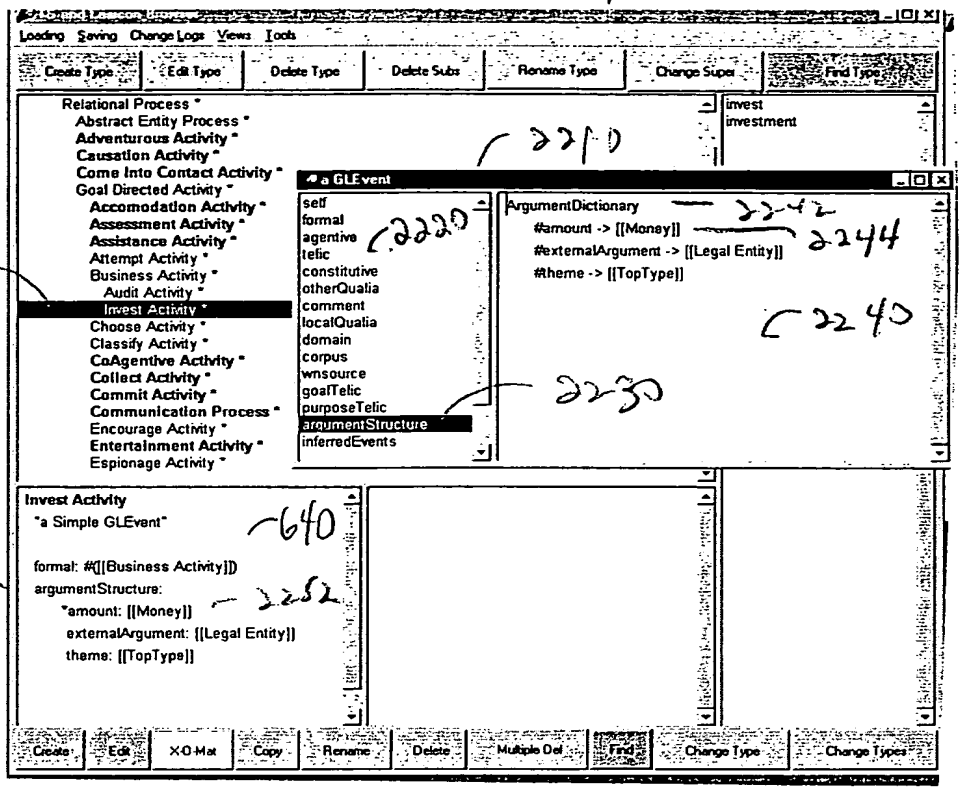


Fig 20

Express Mail Label No. EV 326 010 425 US

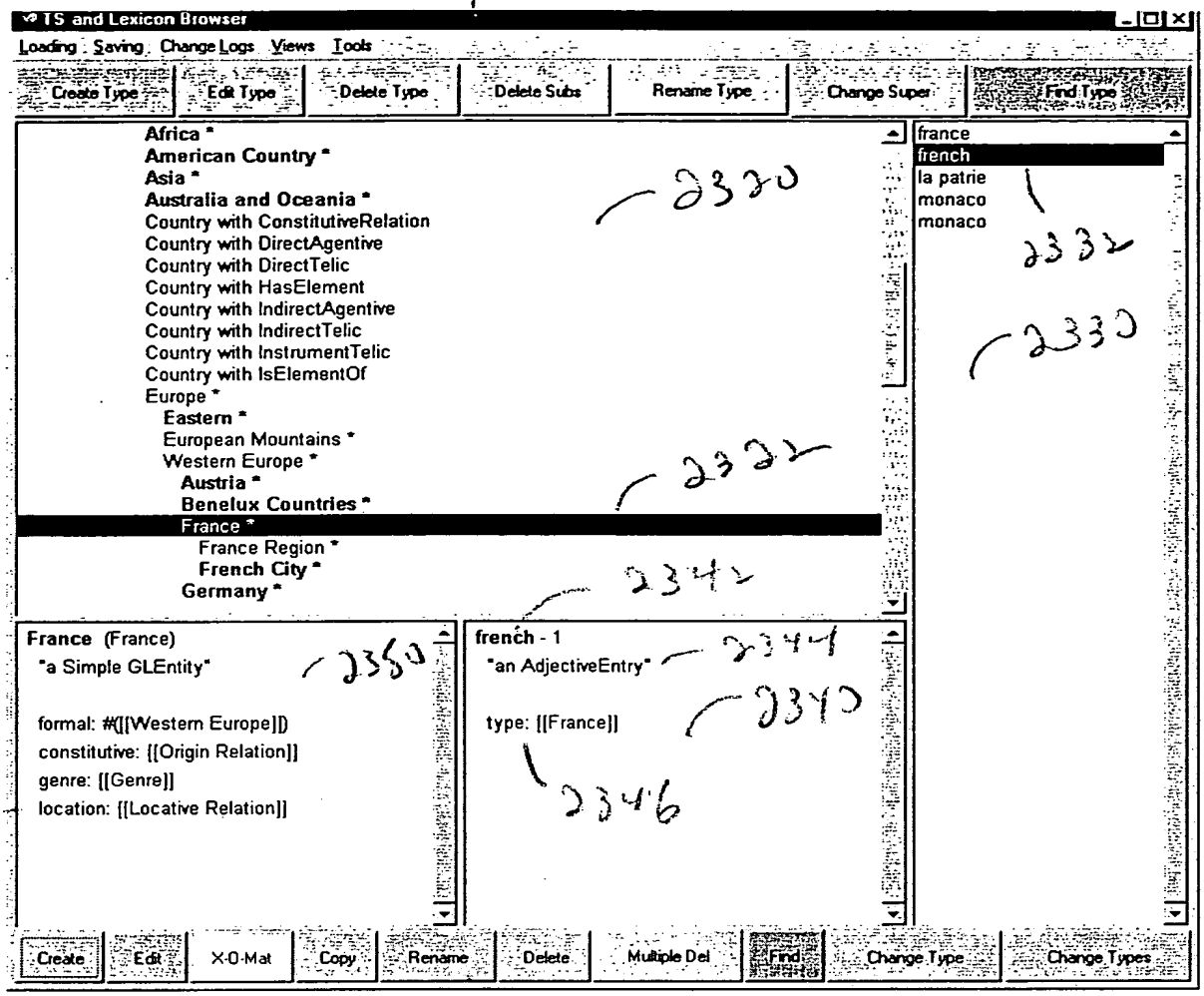

2310
TS and Lexicon Browser
Loading Saving Change Logs Views Tools
Create Type
Edit Type
Delete Type
Delete Subs
Rename Type
Change Super
Find Type
Africa *
American Country *
Asia *
Australia and Oceania *
Country with ConstitutiveRelation
Country with DirectAgentive
Country with DirectTelic
Country with HasElement
Country with IndirectAgentive
Country with IndirectTelic
Country with InstrumentTelic
Country with IsElementOf
Europe *
Eastern *
European Mountains *
Western Europe *
Austria *
Benelux Countries *
France *
France Region *
French City *
Germany *
2320
2332
2342
france
french
la patrie
monaco
monaco
2332
2330
France (France)
"a Simple GLEntity"
2350
formal: #([[Western Europe]])
constitutive: [[Origin Relation]]
genre: [[Genre]]
location: [[Locative Relation]]
french - 1
"an AdjectiveEntry"
2344
type: [[France]]
2340
2346
Create
Edit
X-O-Mat
Copy
Rename
Delete
Multiple Del
Find
Change Type
Change Types

Fig 21

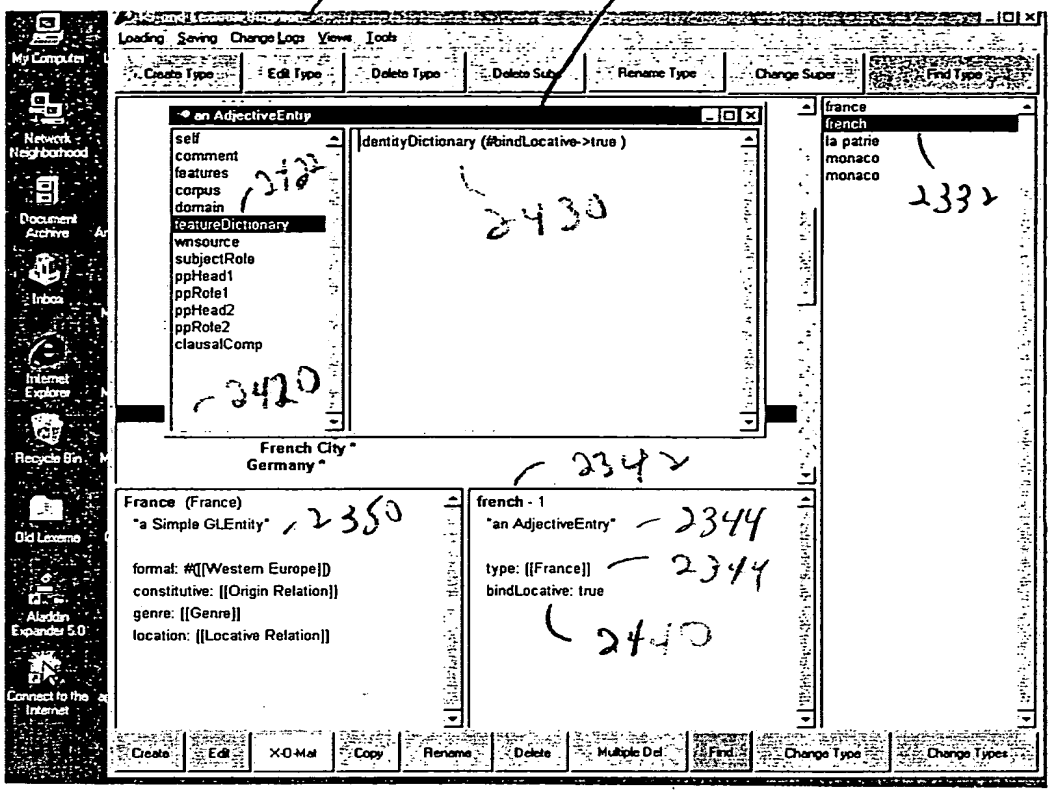


Fig 22

LEXGRID 2005-0000003

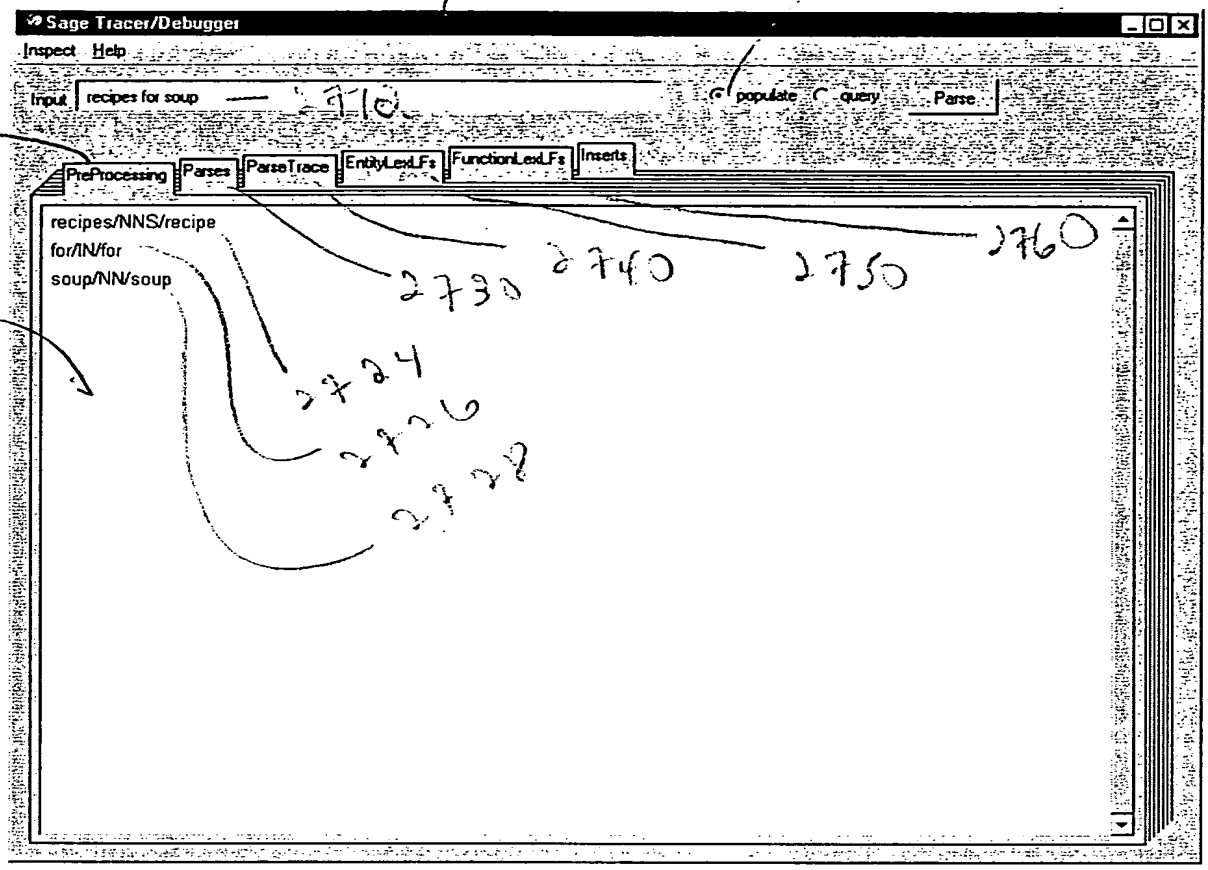

Sage Tracer/Debugger
Inspect Help
Input recipes for soup
populate
query
Parse
PreProcessing
Parses
ParseTrace
EntityLexLFs
FunctionLexLFs
Inserts
recipes/NNS/recipe
for/IN/for
soup/NN/soup
2710
2712
2720
2722
2730
2740
2750
2760
2724
2726
2728

Fig 23

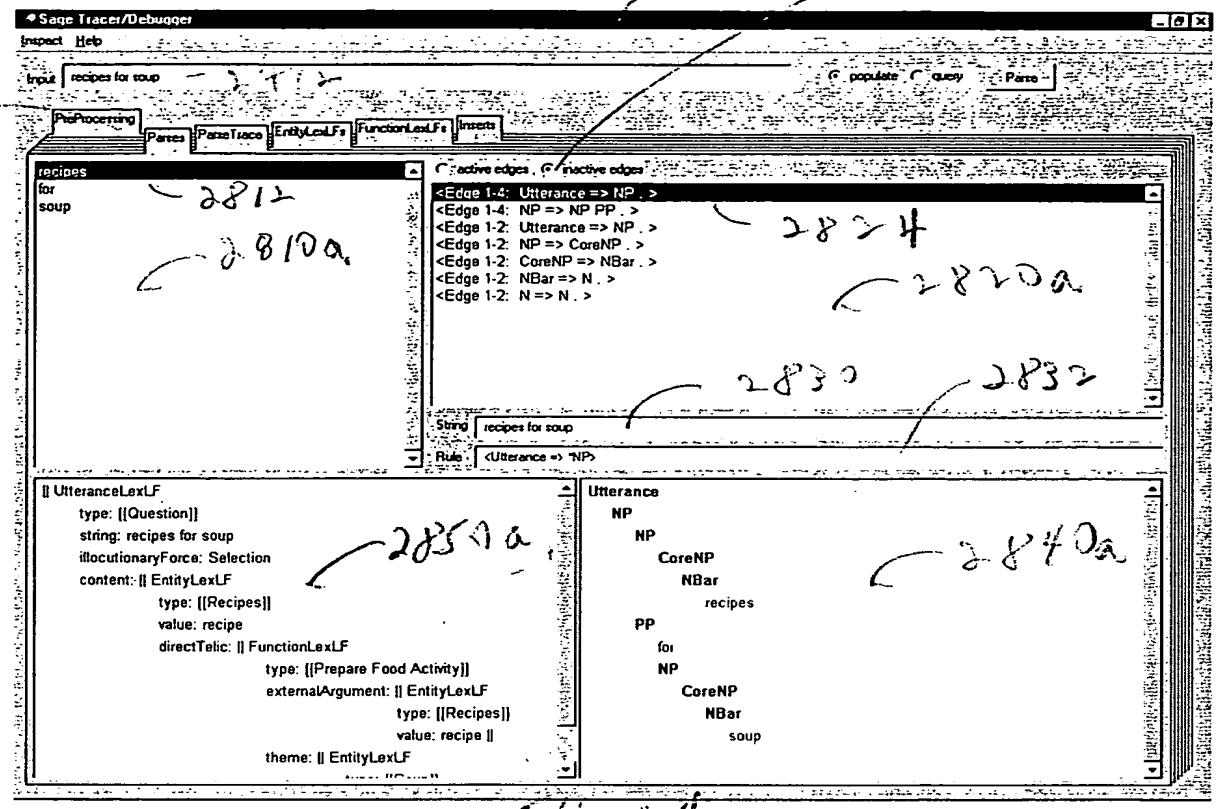

Sage Tracer/Debugger
Inspect Help
Input recipes for soup
populate query Parse
PreProcessing Parses ParseTrace EntityLexLFs FunctionLexLFs Inserts
recipes
for
soup
active edges inactive edges
<Edge 1-4: Utterance => NP . >
<Edge 1-4: NP => NP PP . >
<Edge 1-2: Utterance => NP . >
<Edge 1-2: NP => CoreNP . >
<Edge 1-2: CoreNP => NBar . >
<Edge 1-2: NBar => N . >
<Edge 1-2: N => N . >
String recipes for soup
Rule <Utterance => *NP>
|| UtteranceLexLF
type: [[Question]]
string: recipes for soup
illocutionaryForce: Selection
content: || EntityLexLF
type: [[Recipes]]
value: recipe
directTelic: || FunctionLexLF
type: [[Prepare Food Activity]]
externalArgument: || EntityLexLF
type: [[Recipes]]
value: recipe ||
theme: || EntityLexLF
Utterance
NP
NP
CoreNP
NBar
recipes
PP
for
NP
CoreNP
NBar
soup

Fig 24

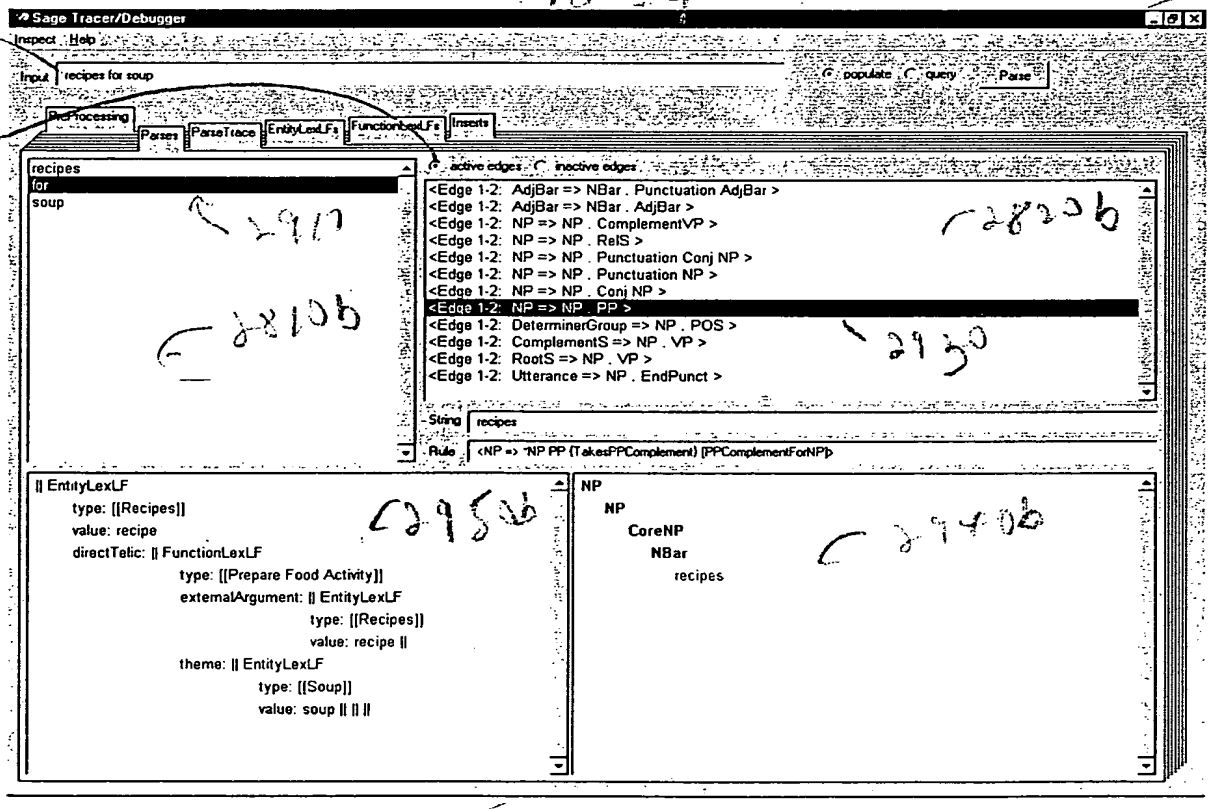

Sage Tracer/Debugger
Inspect Help
Input recipes for soup
populate query Parse
PreProcessing Parses ParseTrace EntityLexLFs FunctionLexLFs Inserts
recipes
for
soup
active edges inactive edges
<Edge 1-2: AdjBar => NBar . Punctuation AdjBar >
<Edge 1-2: AdjBar => NBar . AdjBar >
<Edge 1-2: NP => NP . ComplementVP >
<Edge 1-2: NP => NP . RelS >
<Edge 1-2: NP => NP . Punctuation Conj NP >
<Edge 1-2: NP => NP . Punctuation NP >
<Edge 1-2: NP => NP . Conj NP >
<Edge 1-2: NP => NP . PP >
<Edge 1-2: DeterminerGroup => NP . POS >
<Edge 1-2: ComplementS => NP . VP >
<Edge 1-2: RootS => NP . VP >
<Edge 1-2: Utterance => NP . EndPunct >
String recipes
Rule <NP => *NP PP (TakesPPComplement) [PPComplementForNP]>
|| EntityLexLF
type: [[Recipes]]
value: recipe
directTelic: || FunctionLexLF
type: [[Prepare Food Activity]]
externalArgument: || EntityLexLF
type: [[Recipes]]
value: recipe ||
theme: || EntityLexLF
type: [[Soup]]
value: soup || || ||
NP
NP
CoreNP
NBar
recipes

Fig 25

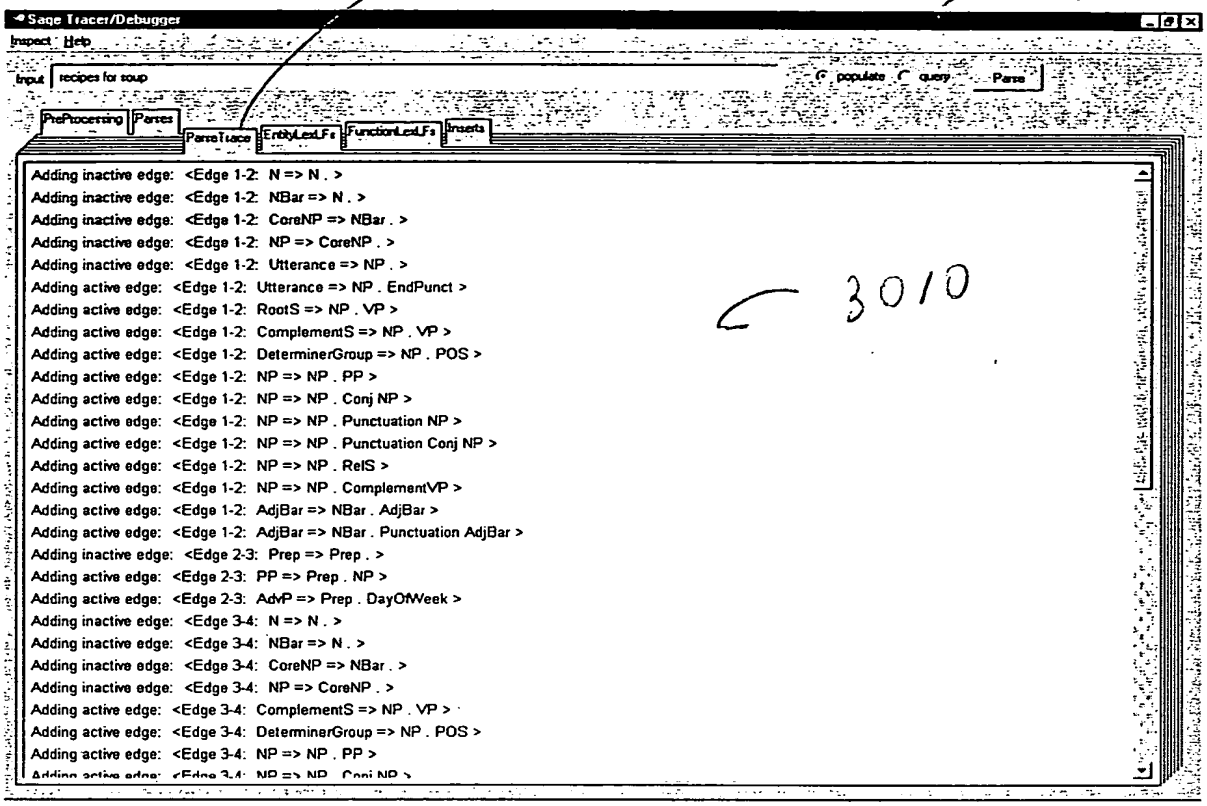
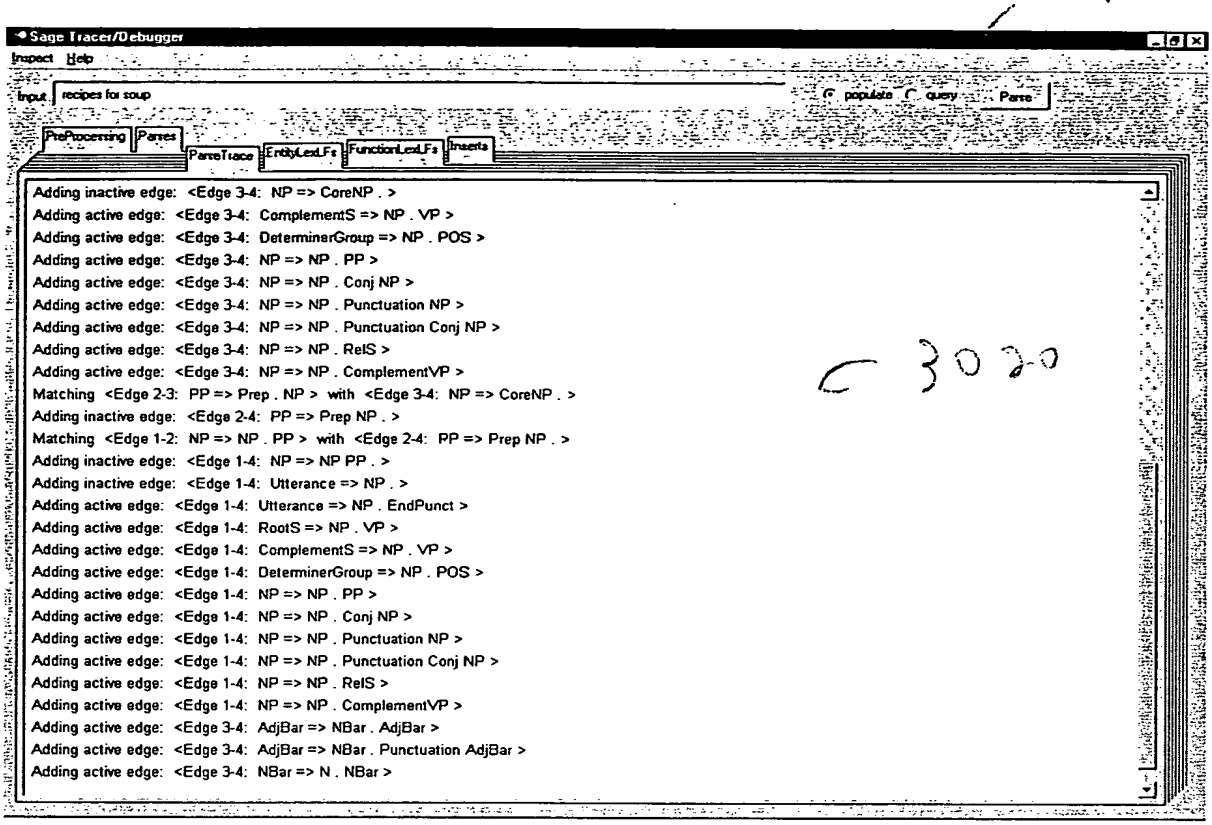

2740
2710
Sage Tracer/Debugger
Inspect Help
Input
recipes for soup
populate
query
Parse
PreProcessing
Parses
ParseTrace
EntityLexLFs
FunctionLexLFs
Inserts
Adding inactive edge: <Edge 1-2: N => N . >
Adding inactive edge: <Edge 1-2: NBar => N . >
Adding inactive edge: <Edge 1-2: CoreNP => NBar . >
Adding inactive edge: <Edge 1-2: NP => CoreNP . >
Adding inactive edge: <Edge 1-2: Utterance => NP . >
Adding active edge: <Edge 1-2: Utterance => NP . EndPunct >
Adding active edge: <Edge 1-2: RootS => NP . VP >
Adding active edge: <Edge 1-2: ComplementS => NP . VP >
Adding active edge: <Edge 1-2: DeterminerGroup => NP . POS >
Adding active edge: <Edge 1-2: NP => NP . PP >
Adding active edge: <Edge 1-2: NP => NP . Conj NP >
Adding active edge: <Edge 1-2: NP => NP . Punctuation NP >
Adding active edge: <Edge 1-2: NP => NP . Punctuation Conj NP >
Adding active edge: <Edge 1-2: NP => NP . RelS >
Adding active edge: <Edge 1-2: NP => NP . ComplementVP >
Adding active edge: <Edge 1-2: AdjBar => NBar . AdjBar >
Adding active edge: <Edge 1-2: AdjBar => NBar . Punctuation AdjBar >
Adding inactive edge: <Edge 2-3: Prep => Prep . >
Adding active edge: <Edge 2-3: PP => Prep . NP >
Adding active edge: <Edge 2-3: AdvP => Prep . DayOfWeek >
Adding inactive edge: <Edge 3-4: N => N . >
Adding inactive edge: <Edge 3-4: NBar => N . >
Adding inactive edge: <Edge 3-4: CoreNP => NBar . >
Adding inactive edge: <Edge 3-4: NP => CoreNP . >
Adding active edge: <Edge 3-4: ComplementS => NP . VP >
Adding active edge: <Edge 3-4: DeterminerGroup => NP . POS >
Adding active edge: <Edge 3-4: NP => NP . PP >
3010

Fig 2b a

2710



C 3020

Fig 26b

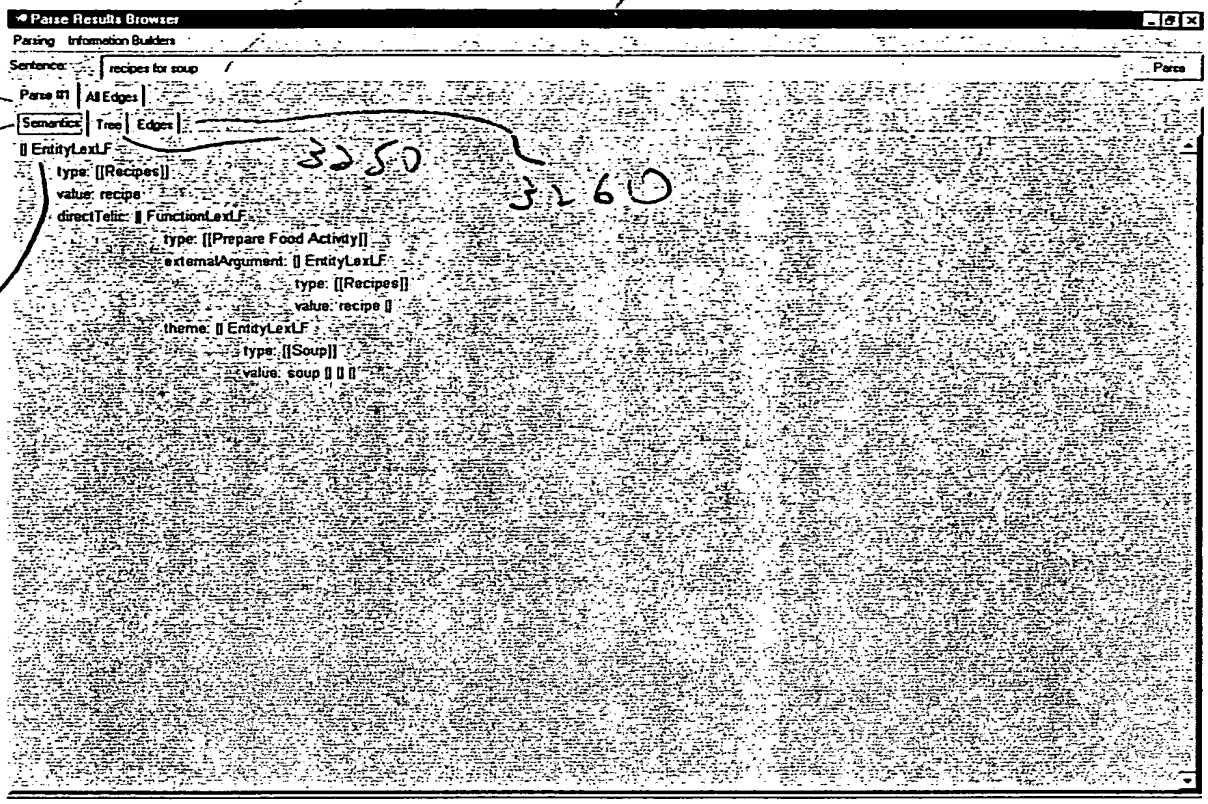
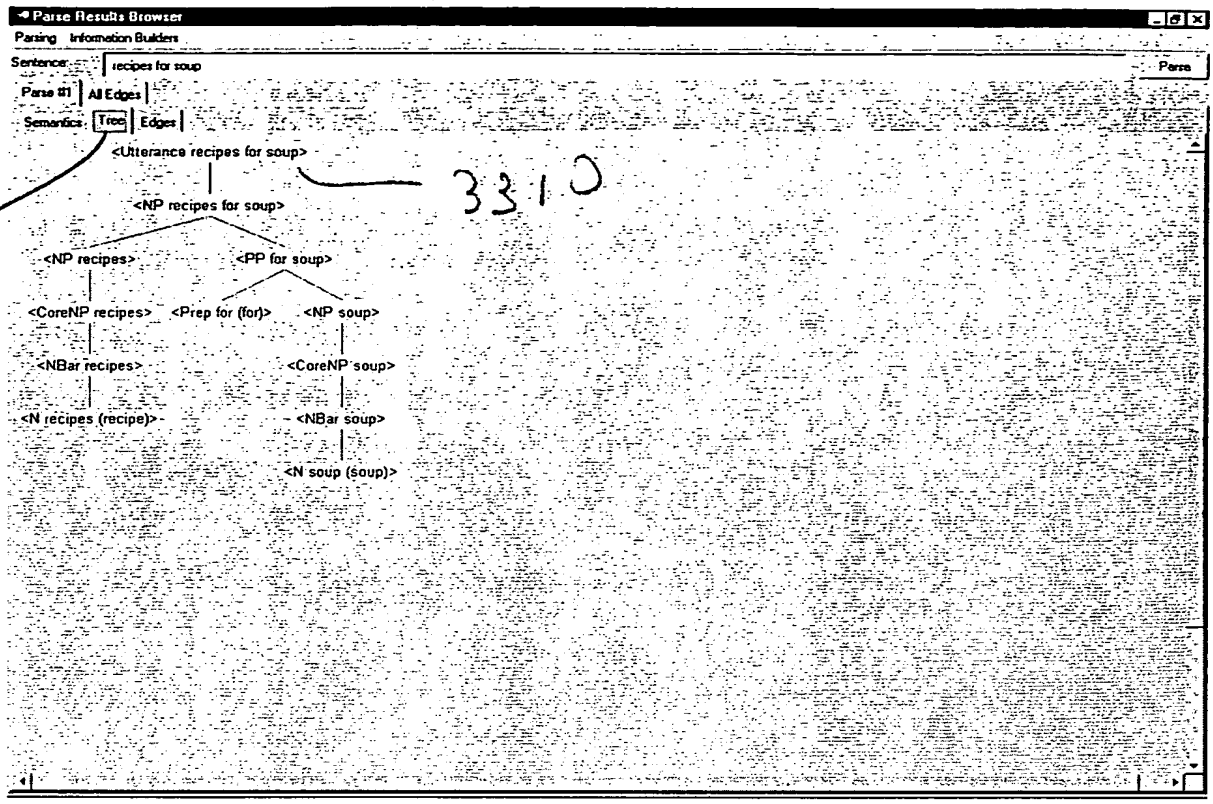


Fig 27

US 7,266,535 B2



3210

3250

3310

Fig 28

EXPRESS MAIL NO. EL 985 035 643

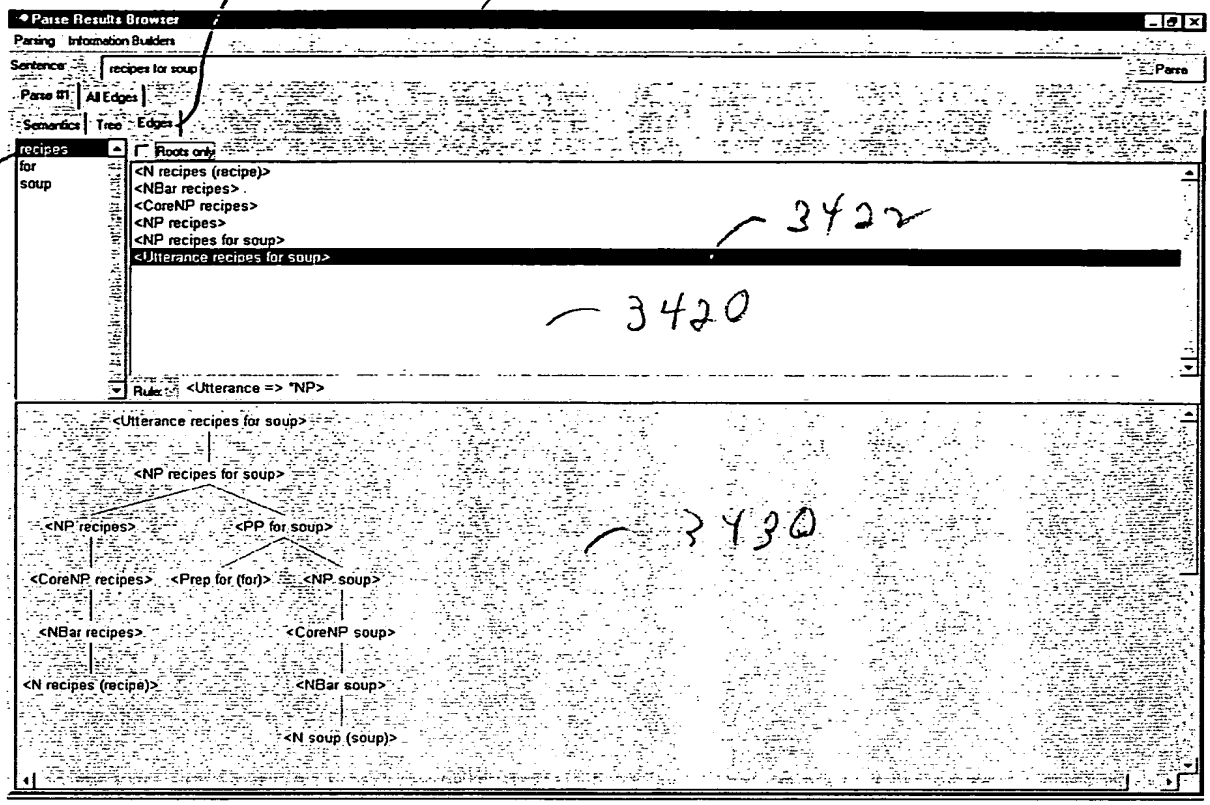


Fig 29

US 2003/0233224 A1

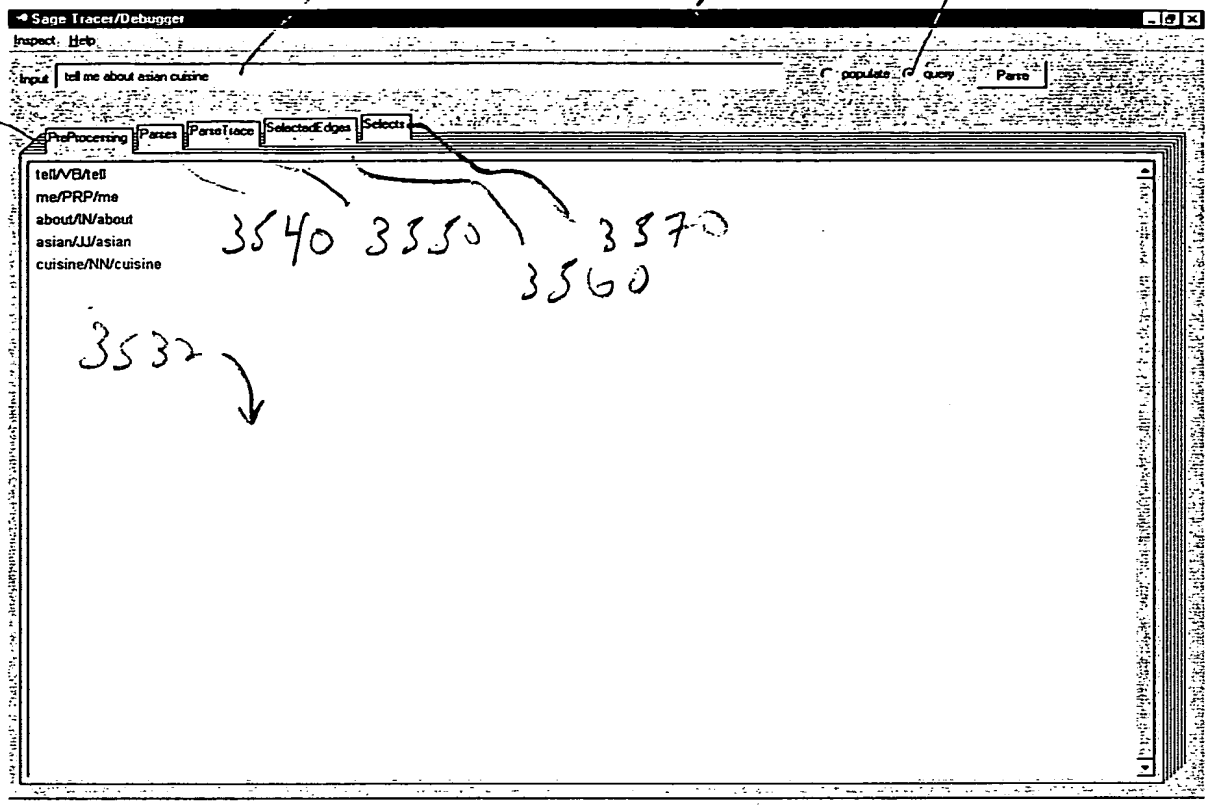

3521
3510
3522
Sage Tracer/Debugger
Inspect Help
Input
tell me about asian cuisine
populate
query
Parse
PreProcessing
Parses
ParseTrace
SelectedEdges
Selects
tell/VB/tell
me/PRP/me
about/IN/about
asian/JJ/asian
cuisine/NN/cuisine
3540
3550
3570
3560
3532

Fig 3D

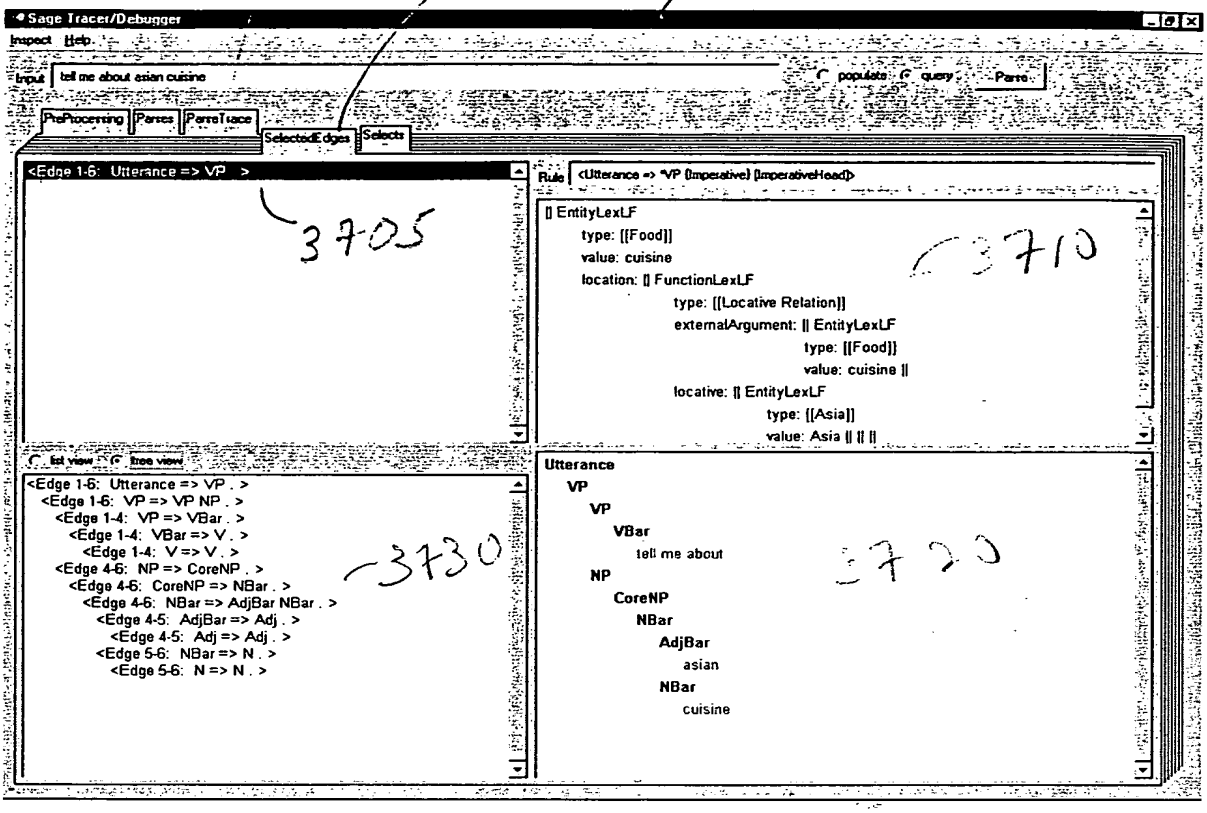

3520
3560
3510
Sage Tracer/Debugger
Inspect Help
Input
tell me about asian cuisine
populate
query
Parse
PreProcessing
Parses
ParseTrace
SelectedEdges
Selects
<Edge 1-6: Utterance => VP >
3705
Rule
<Utterance => VP (Imperative) [ImperativeHead]>
[[EntityLexLF
type: [[Food]]
value: cuisine
location: [[FunctionLexLF
type: [[Locative Relation]]
externalArgument: [[EntityLexLF
type: [[Food]]
value: cuisine]]
locative: [[EntityLexLF
type: [[Asia]]
value: Asia]]]]
3710
list view
tree view
<Edge 1-6: Utterance => VP . >
<Edge 1-6: VP => VP NP . >
<Edge 1-4: VP => VBar . >
<Edge 1-4: VBar => V . >
<Edge 1-4: V => V . >
<Edge 4-6: NP => CoreNP . >
<Edge 4-6: CoreNP => NBar . >
<Edge 4-6: NBar => AdjBar NBar . >
<Edge 4-5: AdjBar => Adj . >
<Edge 4-5: Adj => Adj . >
<Edge 5-6: NBar => N . >
<Edge 5-6: N => N . >
3730
Utterance
VP
VP
VBar
tell me about
NP
CoreNP
NBar
AdjBar
asian
NBar
cuisine
3720

Fig 31